by GEORGE A. TAUBENECK

Stories of the cek Choice Excerpt from a Private Collection of .. ewspaper 'Slips' Advice for Salesmen Summer Gags of the Week The Russian Problem and Businessmen

Stories of the Week

Professional income tax-filler-outer tells us that he helped Ed Martin with FORM 1020 year after year. March, 1953, was a different deal.

"Hain't a-goin' to be a customer of yours no more," announced Ed. "Feller in my office gives his income tax business to a Joe who got him a \$17 refund last year. You ain't never done that fer me.'

Came columnist Dorothy Kilgallen to an innoculation center. (She was going overseas, of course). A sergeant in the Medical Corps brandished his needle.

"Roll up your sleeve," he automaticked.

"Oh, no," protested Dorothy. "Sensitive, huh? Okay. Pull down

a nylon.'

Dorothy protested again. "There's only one spot left," sighed the sergeant, "and I can't take charge there. Our captain has dibs on it.

There was a lull in the poker game while sandwiches were served. The talk got around to spankings for children.

One fellow was agin it. "Worst whipping I ever got as a lad," he recalled "was for telling the truth."

Moment's silence.

"Guess it cured you, Jake," nasaled a pal, between bites.

To the question, "What machines can you operate?" a GM applicant filled in the blank line: 'Slot and Pin Ball."

When Bob returned from the Navy his Mother and Father met him at the train. All three then piled into the front seat of the family car.

"Kinda tight in here," observed Bob. "You been eatin' too many potatoes, Mom?'

"I haven't gained a pound," she

"Mebbe your cargo has shifted."

(This one slayed grampaw) Fellow who used to be seen at more first nights than any other person in town wasn't a drama critic.

He was a bellboy at a Niagara Falls Hotel.

Choice Excerpts from a Private Collection of Newspaper 'Slips'

"Having lost the key to my filling station, I have decided to stay open all night."-Classified advertisement in the Detroit Times.

"The area in which Miss Garson was injured is spectacularly scenic." -Monterey Peninsula Herald.

"Mr. and Mrs. Seligman have lied most of their married life in Hartford."-New York Times.

"Judge Bentley, one of our most eligible bachelors, is retiring from politics. Hale, hearty, and 55, the Judge says he wants a little peach and quiet."-Corliss (Calif.) Journal.

"Revival meeting tonight, Bethel Church. Subject: 'Hell.' James Wilson, tenor, will sing: 'Tell mother I'll be there'."-Marshall Herald.

"Black formal size 12, worn once. Sell or trade for extra bed."-Oklahoma Times.

Headline from the Portland Oregonian.

> AUSTRALIA FINDS CURE FOR BABIES

Advice for Salesmen

"Fifty per cent of getting ahead in the sales world is listening to what the customer says; the other 50% consists of approving it."-O. H. BATTISTA in Specialty Salesman Magazine.

(Concluded on Page 7, Column 1)

ISSUED EVERY MONDAY AT 450 W. FORT ST., DETROIT 26, MICHIGAN. ESTABLISHED 1926.



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Are Room Cooler Manufacturers McKesson Is ARI Kidding Themselves Today?

HOW MANY room air conditioners will be sold and installed in 1953? Six months ago AIR CONDITIONING & REFRIGERATION NEWS engaged in a round-robin tour of practically all the manufacturers, seeking their answers to that question.

Their marketing and research departments had been studying the problem for months, and had arrived at figures which production planners accepted as gospel. Composite prediction:

True, some manufacturers with long records of experience in the industry doubted if half a million room coolers could be sold in 1953. And one or two late-comers went as high as 750,000.

But the concensus was 600,000. And that figure has been widely quoted and relied upon ever since.

However, something startling-and perhaps alarming-has happened. Nearly every manufacturer apparently decided that he

(Concluded on Page 10)

Worthington To Build 'Expansion' Is Factory In Alabama Key Word at

HARRISON, N. J.-Worthington Corp.'s plans for the construction of a new plant in Decatur, Alabama, for the manufacture of air conditioning equipment were announced recently by Hobart C. Ramsey, president, following approval at a meeting of the board of directors on May 20.

Negotiations for the acquisition of the plant site, a 100-acre tract of land bordering the Tennessee River, have been in progress for a number of weeks.

The company stated that only manufacturing operations for selfcontained air conditioning equipment and related items are being considered for the proposed new plant. Engineering, research, and sales functions relating to air conditioning units will be carried on at Holyoke, Mass. Works, as will the manufacture of compressors.

It is estimated that the initial plant and equipment will represent an investment of approximately \$3,500,000 and will employ up to 400 persons.

Construction will begin in June and at present Worthington Corporation contemplates occupancy by Novem-

A building approximately 240 ft. (Concluded on Back Page, Column 3)

Sweetland Named Gen. Manager of BTC Division

BINGHAMTON, N. Y.-Walter D. Sweetland has been named general manager of the Brewer-Titchener Corp.'s Crandal

Stone Div. here. In his new capacity, Sweetland will head the division's two Binghamton plants and New Milford, Pa. plant which produce stampings for leading automotive and aviation manufacturers and

make BTC frozen W. D. Sweetland food, ice cream and dairy product cases, and ice cube

makers.

Sweetland joined the division in 1922. In 1926 he was transferred to the firm's main office in Cortland, where he handled customer contacts for the Binghamton Div. From 1934 until the present, he handled customer relations for the company's Cortland Forging Div.

For Air Conditioning Supermarket Show

CLEVELAND-More supermarkets will be built or remodeled this year than in 1952 by members of the Super Market Institute, it was brought out at the group's 16th annual conven-

"Projecting the 'definite expansion plans' to the entire membership, the SMI member companies expect to construct about 625 new supermarkets and extensively remodel about 400 supers during the year,' said Curt Kornblau, manager of SMI's Research and Information Service.

Approximately half of the companies (49%) have definite plans for expansion in 1953, compared to 44%

last year, reported Kornblau. (Concluded on Back Page, Column 1)

Mueller Brass Suffers No Tornado Damage

PORT HURON, Mich. - Mueller Brass Co. here, manufacturer of refrigeration valves, fittings, and other accessories, suffered no damage whatever to its production facilities in the tornado which struck this community last week.

There was only a brief halt in production because of lack of power, and no Mueller personnel were injured, company officials report. The tornado cost several lives and some \$10 million in damage in Port Huron and Sarnia, Canada, the city across the river from Port Huron.

Licensing for Auto Air Conditioning Installation, Service Gets Hearing

DETROIT-Whether or not automobile manufacturers and dealers who install and service automobile air conditioning units should be excluded from the licensing provisions of Detroit's refrigeration safety code will get another hearing before the city's Department of Buildings and Safety Engineering on Tuesday,

Frank Drogosch, chief safety engineer for the city, has invited representatives of the Refrigeration and Air Conditioning Contractors Association of Detroit and the Automobile Manufacturers Association to (Concluded on Back Page, Column 5)

President; Merger Action Progresses

WASHINGTON, D. C .- L. C. Mc-Kesson, vice president in charge of sales, Ansul Chemical Co., was elected president of the Air-Conditioning and Refrigeration Institute at its first board of directors meeting on May 18. He is presently president of the Refrigeration Equipment Manufacturers Association which merged with the Air Conditioning and Refrigerating Machinery Association to form the ARI.

A. J. De Fino, general manager of Fedders-Quigan Corp., was elected vice president, and James Emmett, vice president, James P. Marsh Corp., was elected treasurer.

These three officers, with the addition of M. M. Lawler, The Worthington Corp., and W. F. Switzer, Frigidaire Div., General Motors Corp., will form the executive committee of ARI.

George S. Jones, Jr., formerly vice president in charge of sales, Servel, Inc., has been named as managing director of ARI.

The institute has been incorporated under the non-profit law of the state of Delaware, and by-laws were approved at the board meeting.

The merging of the offices and activities of the two groups will be gradual, it was stated. Product sec-(Concluded on Page 4, Column 2)

Room Air Conditioner Section of ARI Plans Membership Expansion

HIGHLAND PARK, Ill. - Expansion of membership was a main topic of discussion at a meeting here last week of the Room Air Conditioner Section of the newly-formed Air-Conditioning & Refrigeration Institute.

During the meeting, held at the Moraine hotel May 27 and attended by over 65 representatives of some 35 companies, it was announced that membership is now open both to manufacturers and to firms fulfilling the functions of a manufacturer.

Reporting conclusions of the si ing committee, Herbert L. Laube, retiring section chairman and president of Remington Corp., said that for the current year (to April 30, 1954) eligible non-members can join for a flat fee of \$350, irrespective of volume. He also reported that the (Concluded on Back Page, Column 4)

White-Rodgers Names Sherer as Sales Chief

ST. LOUIS-White-Rodgers Electric Co. here has announced the appointment of R. A. Sherer as sales manager. with

headquarters in St. Louis. Sherer has been

connected with White-Rodgers Co. since 1943 and has come up through the ranks. Startas general ing foreman of night factory operations, he later became general foreman of inspection and

then manager of the quality control

division. In 1948 he was transferred to sales, first handling special project sales, then being attached to the Chicago region as Chicago district manager, and finally becoming Chicago regional manager, a position he now leaves to become sales manager.

Distributors Get **Optimistic Note** Fro:: Producers

Wampler Sees New Pattern In Conditioner Distribution; Sharp Hits Inventory Story

CHICAGO-Declaring that electrical distributors "can well afford to deal in air conditioning right straight across the board," Cloud Wampler, president of Carrier Corp., last week told the Appliance Div. of the National Association of Electrical Distributors that residential air conditioning offers the greatest long-term opportunity.

Speaking during NAED's 45th annual convention at the Conrad Hilton hotel here, Wampler stressed that although the room air conditioner business is "pretty sizeable," it should not be overestimated in relation to the air conditioning industry as a whole.

"My sonal view," he said, "is that re air conditioners—year in and year on —will account for about 15% On olume."

Anot -r convention speaker, John C. Sharp, president of Hotpoint Co., struck out at the "viewers-withalarm and self-appointed authorities" who are making "doleful predictions" that the appliance business is headed for troable.

He aimed there was no justificastatements that credit is tion over-t ied, manufacturing capacities a: no great, and inventories beyond : er limit.

Two speakers agreed that color TV may make its appearance next year on a limited basis. They were Dr. Walter R. G. Baker, vice president in charge of electronics, Electric Co., and chairman of the National Television System Committee, and H. C. Bonfig, vice president and director of sales, Zenith Radio Corp.

Dr. Baker and Bonfig also agreed that color TV would be a luxury item for some time and would not completely replace black and white TV for many years, if ever. The former said he was confident that the standard black and white receiver "will continue to be the backbone of television sales for at least five years."

Dr. Baker predicted that "actual color transmission in the great majority of television markets across the country is a lot closer than many of you have been led to believe."

Ranking the long-term opportunities in air conditioning, Wampler put residential air conditioning in first place and room air conditioners in

"With respect to third place," he said, "I am not quite sure whether this should be assigned to self-contained units or installed air conditioning. So . . . I am going to call it a tie, greatly hoping that you will take a good look at both fields."

emphasized doesn't believe one department in a distributing organization can deal (Concluded on Page 4, Column 4)

La Crosse Cooler Introduces 2 New Upright Freezers

LA CROSSE, Wis. - Two upright freezers, the first to be manufactured by the company, have been announced by the La Crosse Cooler Co. here.

Called the "Polar Pantry," they are available with or without inner doors in 19 and 27 cu. ft. capacities. Other features include all steel construction, built-in door lock, automatic alarm (Concluded on Page 4, Column 5)

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Fresh Fruit Pie Offer Builds Prospect List for Freshmaster Freezer Dealers

ing to the copy.

NEW YORK CITY-To help promote his new upright Freshmaster food freezer, John Bess, president of Freshmaster Corp., recently offered a free pie to people who would write and suggest a name for the freezer.

The proposition was launched in a full page advertisement in the New York Daily News. The ad contained an eight-question survey questionnaire that, the ad indicated, would give the company needed information for its national advertising and promotion program.

In return for filling out the survey, the reader would be sent a free fruit pie that carried a retail price of 69 cents. This, the ad said, represents payment at the rate of \$83 per hour.

These are the questions asked and the possible answers given. The reader was asked to check off his preferred answer:

1. In your opinion, what is the most attractive aspect of owning a home freezer?

A. Convenience

B. Economy C. Nutrition value of frozen foods

D. Other reason.

2. What kind of dwelling do you live in?

A. Apartment house

Brownstone C. Private home

D. Semi-detached

3. Do you own a freezer? A. Upright type

B. Chest type

C. Don't own a freezer

4. Would you like to own a freezer?

A. Yes B. No

C. Maybe, if the price was right D. Haven't thought about it

5. Please check the slogan that seems most effective.

A. "Now everyone can afford a food freezer!"

B. "Here's the new way to freeze

food prices!" C. "Doctor says frozen foods are

fresher than fresh!" "Imagine, a freezer that costs

less than most refrigerators!"

"Get twenty-five degrees below the high cost of living!"

F. "I do my supermarketing right in my own kitchen!"

6. Please check the trade-name that

appeals to you most

A. Freshmaster 295 B. Freshmaster Freeze-up

Freshmaster Kold-keeper

Freshmaster Wonder-freeze E. Freshmaster Fasterfreeze

7. How many mouths do you feed?

A. Adults B. Children

C. Pets

8. What is your present monthly

food budget? A. \$50

> B. \$60 C. \$70

> D. \$80 E. \$90

F. \$100 G. Other figure

The ad included a picture of the Freshmaster upright and a list of its features. Retail selling price was given as \$295-"less than the cost of



FLO-COLD Stainless Steel DRINKMASTER

ICE CUBER-COOLER "A CASE OF COOL JUDGMENT."

Mfg. by

United Friguator Engrs. Menominee, Mich.

Write for free 8" x 10" photos

Ben-Hur Offers 'A B C's' Of Food Freezing for User

MILWAUKEE - A 128-page, expansible book, "The ABC's of Food Freezing," was published recently by Ben-Hur Mfg. Co.

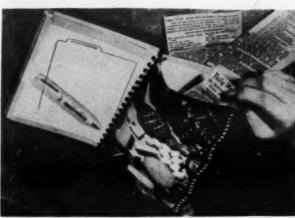
Written by Martha Kimball, Ben-Hur's director of home economics, the illustrated book shows the freezer user how to organize her frozen food living from garden to dinner plate.

A fresher, more comprehensive approach to the whole picture of consumer literature is revealed in the book which tells the story of home freezing and storage of food in the language of the homemaker.

More than a users manual, the Kimball book is designed to serve as the only guidebook needed in the kitchen of a freezer-equipped home. Appealing features of the "ABC's" include envelope dividers in which the user may catalog and keep spe-

To tailor the book to her individual needs, the user may write in "My

cial recipes.



ENVELOPE DIVIDERS bound into the book make "ABC's of Food Freezing" the central record file for the housewife in her frozen food living. As shown here, the envelopes will hold recipe clippings, printed menus, or notes the user wants.

Own Suggestions" in space provided for additions or personal preferences in adjusting the printed information to her family's tastes.

Basic distribution of "ABC's of Food Freezing" will be through Ben-Hur distributors and dealers, says R. C. Graves, general sales manager for

Ben-Hur, at \$1.50 per copy, retail. A copy will be packed in every Ben-Hur freezer.

It will be available at reduced price to schools and professional home economists, and to consumers responding to coupon advertisements in homemaker publications.

SEE THE NEW NORGE FOOD-SAVER TEAM!

NORGE

most modern refrigerators," accord-

Persons who wished to telephone

in their answers to the survey were

given the telephone numbers of vari-

ous branches of Valmart-New York,

Inc., local distributor of Freshmaster

Valmart officials reported that

more than 5,000 people filled out the

questionnaire in the days im-

mediately following the appearance

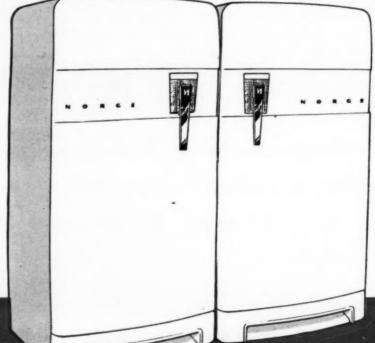
of the advertisement. They were

being added to dealers' prospect lists.

Jet-Freeze HOME FREEZER

It's the country's fastest selling upright freezer! New open design of Jet-Freeze shelves sends penetrating cold throughout the Freezer. Line also includes giant double upright freezer and 3 chest-type freezers.

5 models-\$349.95 to \$699.95.

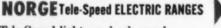


NORGE

Jet Self-D-Frost REFRIGERATOR

New automatic Jet defrosting removes frost every 24 hours -does it so fast even ice cream stays firm. Sales-clinching features include Handidor, full-width freezer chest, Butter Bank, sensible prices. 9 models—to \$399.95.

0,0



Tele-Speed lights on back panel tell which of 7 surface speeds is oneven 20 feet away! 7 models-\$169.95 to \$359.95.



NORGE GAS RANGES

New Radiant Broiler cuts broiling time in half-distributes heat evenly. 10 models (including 2 CP's)-\$99.95 to \$299.95.



retard corrosion, rusting. Backed by 10-year Protection Plan. Upright and table-top models . . . 12-82 gallon capacity.



NORGE CONVENTIONAL WASHERS

Exclusive Pyramid construction prevents tipping. All models equipped with Triple-Action agitator. 7 models -\$99.88 to \$159.95.

Norge Sales Training and Product Manual Designed For Distributor Salesmen

CHICAGO-Publication of a comprehensive sales training and product manual for distributor salesmen was announced recently by the Norge Div. of the Borg-Warner Corp.

H. L. "Red" Clary, vice president in charge of sales, said "The Norge Product Story," a 126-page loose-leaf book, is expected to strengthen Norge's position by refining distributor techniques for selling and holding retailers.

The manual runs the detailed gamut of a wholesalesman's activities, from evaluating new dealer prospects to demonstrating ap-

The manual tells wholesalesmen how to help dealers set up an appliance sales program, highlights methods of dealer relations, and includes an outline for training meet-

Covered briefly is Norge's history, and present and future opportunities

Field's Package Kitchen Price Includes Installation

CHICAGO-Normal installation is included in the advertised price of four package General Electric kitchens now being offered by Marshall Field & Co. here.

The department store is promoting two straight-line packages at \$995 and two L-shaped packages at \$1,195. Only one package in each category includes a center window.

The straight-line package is 72 in. long. It consists of sink with disposal unit, dishwasher, three 24-in. wall cabinets, one 24-in. two-door base cabinet with drawer, one 24-in. twodoor sink cabinet, one 24-in. sink front, and a 72-in. table top with built-in sink.

The L-shaped package includes the straight-line package plus a 21-in. base cabinet, one base corner filler, three single-door wall cabinets (12, 15, and 18 in.), and one wall corner filler. This package measures 99 by

The initial advertisement on the

promotion said that the customer would get an free survey to determine their requirements. "All prices subject to compliance with conditions of kitchen survey and installation within Field's free delivery area," the advertisement said.

Normal installation, it was pointed out, includes patching plaster, making electrical connections, removing existing cabinets and sink, filling and square along out-of-plumb walls, and installing new equipment. It does not include installation of flooring, decorating, removing or moving radiators, installation of false ceilings, or changes in windows or doors.

One-day installation was promised on the straight-line packages.

Denver Co. Changes Name

DENVER-Robert F. Clark Co., appliance distributor here, announced that it has changed its name to Ward Terry & Co. The 33-year-old firm, now named for its present president, employs about 50 persons and serves 2,000 dealers in Colorado, Nebraska, Wyoming, and New Mexi-



Church Groups, Admission Fee Furnish Prospects For Utility's Cooking Schools, Eliminate 'Repeaters'

PEORIA, Ill .- To eliminate "repeaters" at its cooking schools-those women who keep coming back to each session in the hope of winning prizes-the Central Illinois Light Co. here has hit upon an idea that has worked out successfully for the past

Lorence O'Russa, sales coordinator for the utility, explained in this way: Instead of advertising its schools, the utility contacts the ministers of local churches and invites the ladies groups of those churches to attend.

Most of the time, the members of only one church are invited to a



DIFFERENT COLORED TICKETS identify groups which attend Central Illinois Light Co.'s demonstrations.

demonstration at a time. The group is encouraged to sell the tickets among its members for 25 cents each.

ing, the utility donates to the group an additional 25 cents. "When they sell the tickets instead of giving them away, people are not so anxious to repeat. When they give

In addition, for each member attend-

them away it gets to be a matter of you come to my demonstration and I'll go to yours."

When demonstrations are held in

smaller outlying communities, the women of three or four different churches are invited. In this case, different colored tickets are given to the various churches so that the utility will know how many came from each.

Demonstrations for Peoria groups are held every Wednesday afternoon in the utility's auditorium and model kitchen. Mrs Leah Slotter, the utility's own home economist, conducts the demontration.

In outlying communities, a Kelvinator factory home economist, Miss Ann Jenness, is taking charge. These cooking demonstrations are held in local churches, schools, theaters, and community halls. Central Illinois Light is merchandising utility handling the Kelvinator line.

The schools place emphasis on electric cooking, but an important role is attached to the use of the home freezer in cooking. The range and freezer are used together in each demonstration.

"While the housewife associates freezers with the storage of food, she is not so well aware of their use in cooking," O'Russa declared. "We show her how the freezer can be used to store dough, or partially baked pies and cakes. We show her how she can pop them right from the freezer into the oven, without defrosting. We thinks this helps a lot in increasing their appreciation of their freezer.

In addition to the cooking demonstration, the utility also puts on a little skit that will emphasis some other product or service the utility is interested in at the moment. These may be washers, dryers, or adequate wiring.

The food cooked at each demonstration is given away to the women attending and a related prize of some sort is also offered.

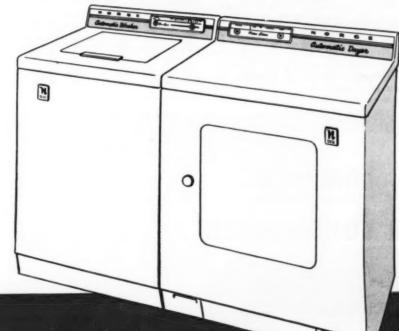
The utility is now booked up solid through early June, when the program will temporarily end.

SEE THE NEW NORGE LAUNDRY MAIDS!

NORGE

Time-Line AUTOMATIC WASHER

Now with exclusive new Safety Spin, the famous Time-Line Washer should set new sales records. For when lid is raised during spin cycle, Safety Spin shuts off spinning action. Close lid, spin resumes. Raising lid during other actions does not stop washer. AW-450 (with Safety Spin), \$299. Without Safety Spin, \$279. Also semi-automatic model for promotional selling.



NORGE

Automatic CLOTHES DRYER

It's the greatest news since dryers were invented! This new Norge provides 4-way selective drying-offers a choice of safe heat for every kind of fabric. Dries clothes so safely, so gently Norge guarantees satisfaction! Gas and electric models from \$239.

MEANS BUSINESS!

SUMMER MARKET . JUNE 22-JULY 3 . CHICAGO MERCHANDISE MART-2nd Floor **FURNITURE MART-SPACE 522**

NORGE ... the value-line of home appliances Division of Borg-Warner • Merchandise Mart • Chicago

This Summer go in for

(a good business)

ROOF COOLING

It's profitable It's easy

We furnish coolers and pipe plans for you. You install with your material as in your other business.

Ask for our literature; no obligation.

RUPPRIGHT'S ROTARY ROOF COOLER

Box 6795 n Los Angeles 22, Calif.

CLEARS UP **MOISTURE** Before You Leave

moment Thawzone is introduced into the system it starts to

combat moisture. You do not have to wait for the moisture to come around. Thawzone acts in all parts of the system at once.

Thawzone actually destroys moisture . Helps prevent corrosion by neutralizing acids . . . Helps prevent copperplating . . . Will prevent as well as overcome moisture trouble . . . A patented invention (cannot be copied) . . . Drying action not "smothered" by oil Can't cause pressure drop.

Costs only about 8¢ per lb. of refrigerant treated . . . For all "Freon" or methyl units . . . Only % oz. per lb. of refrigerant required. Get Thawzone at your wholesaler.





- . BEER & SODA SYSTEMS . STAINLESS STEEL
- . WALK-IN BOXES . REACH-IN BOXES
- WALL CASES
- FREEZERS, Upright,
- THE HABIT, IT WILL PAY TO CALL FRIGITEMP CORP.

. KITCHEN & TAVERN

SINKS

BOTTLE COOLERS

ICE CURE MAKERS

McKesson Heads ARI; Merger Progresses -- Distributors Get Optimistic Picture --(Concluded from Page 1, Column 4) tions and committees will be combined. Every activity of each asso-

ciation will be continued and transferred to the new Institute only after study has developed the manner in which those activities can be set up to the maximum advantage of all members.

REMA WILL HANDLE ALL-INDUSTRY SHOW

Because of the relationship over the years between exhibitors and REMA and because of commitments already made, this year's All-Industry Exposition in Cleveland will be handled and completed by REMA, with George Mills as managing director under the direction of the REMA Exposition Committee. ACRMA members will be entitled to "member rates" for display space.

Members of the board of directors of ARI, which will take over the activities of the Refrigeration Equipment Manufacturers Association and the Air Conditioning and Refrigerating Machinery Association, are:

BOARD MEMBERS

W. H. Aubrey, Frick Co., Inc.; W. F. Bakke, Sub-Zero Freezer Co., Inc.; Cecil Boling, Bush Mfg. Co.; F. G. Coggin, Detroit Controls Corp.; A. J. De Fino, Fedders, Quigan Corp.; John E. Dube, Alco Valve Co.; J. A. Dugan, Bundy Tubing Co.

Lud Emde, Temprite Products Corp.; James Emmett, Jr., Jas P. Marsh Corp.; Maynard Ford, Parks-Cramer Co.: C. V. Gary, Henry Valve Co.; J. A. Gilbreath, Servel, Inc.; B. W. Hanson, Schaefer, Inc.; G. A.

Heuser, Henry Vogt Machine Co.

G. K. Iwashita, Commercial Products Dept., General Electric Co.; J. F. Knoff, Airtemp Div., Chrysler Corp.; J. W. Krall, Tyler Fixture Corp.; L. W. Larsen, Tecumseh Products Co.; S. E. Lauer, York Corp.; M. M. Lawler, Worthington Corp.

L. C. McKesson, Ansul Chemical Co.; M. E. Mooney, Baker Refrigeration Corp.; A. B. Newton, Acme Industries, Inc.; H. C. Patterson, Nash-Kelvinator Corp.; A. P. Shanklin, Carrier Corp.; T. E. Smith, Westinghouse Electric Corp.; W. F. Switzer, Frigidaire Div., General Motors Corp.

R. J. Thompson, E. I. du Pont de Nemours & Co., Inc.; O. A. Vogel, Vilter Mfg. Co.; G. E. Wallis, Cream-ery Package Mfg. Co.; and Fred Weldon, General Controls Co.

ADVISORY MEMBERS OF BOARD

Advisory members of the board of directors are:

E. M. Flannery, Bush Mfg. Co.; H. Hildreth, Westinghouse Electric Corp.; R. H. Israel, Virginia Smelting Co.; R. H. Luscombe, Penn Controls, Inc.; W. A. Siegfried, Superior Valve & Fittings Co.; H. F. Spoehrer, Sporlan Valve Co.; and K. B. Thorndike, Detroit Controls Corp.

Following the meeting, L. C. Mc-Kesson, president of ARI, said, "We are extremely happy to have accomplished the consolidation of REMA and ACRMA. It brings together over 150 of the leading manufacturers of refrigeration and air conditioning equipment and gives to the industry a united front which we believe will result in greater service to all of our members and in greater and more far-reaching activities."

(Concluded from Page 1, Column 5) successfully with these four areas.

"My view," he explained, "is that one group will have to handle room air conditioners and self-contained units. Then there should be a second group that specializes in residential air conditioning. And finally, there ought to be still another group that will organize itself to sell equipment that goes into systems or install the systems under its own steam."

ANSWERS 'ALARMISTS'

To illustrate his contention that "air conditioning is on the march," he reported that during the 12 months ended April 30, Carrier did \$141,600,000 worth of business, booked new orders in the amount of \$167,612,000, and realized profits of \$4,827,000 after taxes.

Answering the "alarmists," Sharp analyzed present credit, manufacturing capacity, and inventory situations. He said, in part:

"Reliable statistics show that consumer credit at the end of 1940 was 31% of the yearly spending power after necessities of life were paid for. At the end of 1952, the consumer credit was only 18% of the yearly income after paying for food, clothing, and shelter.

"Next, let's consider manufacturing capacities.

"Plants require tremendous investments. If an investment in any plant is to be considered a good one, it must be capable of keeping abreast of the needs for 10 years at least. Therefore, I give little ear to the claim of over-capacity-a few years, yes-most years, no.

INVENTORIES ARE DOWN

"Then there was the subject of inventories. Statistics show that on April 30, 1952, there were 1,173,000 refrigerators in the combined stocks of distributors and manufacturers. At April 30 of this year, there were 22.5% less in these same stocks, or a total of 914,000. Generally, the dealers have no appreciable inventory.

"The situation on electric ranges is even more favorable. On April 30, 1952, there were 344,000 ranges in warehouses at factory and distributor level. On April 30, 1953, there were 28% less, with 247,000 in stock. Most dealers have inadequate display stocks of ranges, let alone a working

Sharp said Hotpoint's business is running about 90% ahead of a year

Dr. Baker predicted that if the FCC approves the NTSC compatible system now undergoing final field tests, color TV will be a factor in merchandising in the fall of 1954.

He said it now appears possible that NTSC can conclude its technical work by September and petition the FCC for a hearing in October or early November. This means, he noted, that the hearing could be scheduled early in 1954 and the NTSC system could

be approved by March 1, 1954. "If this should happen," he continued, "I think I can safely predict that some color programs would be available in key city markets shortly thereafter and that color programs, put on the networks, might actually be available in many local markets certainly by the middle of 1954.

"A color receiver will probably use 45 to 50 receiving tubes, more than twice that of a black and white set. Add the cost of these tubes and necessary circuitry and it becomes evident that a color receiver will have to be priced at \$800 or more."

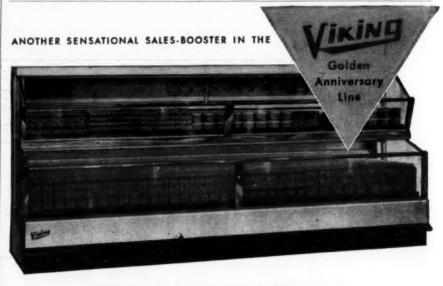


La Crosse Upright Freezer - -

(Concluded from Page 1, Column 5) system, illuminated compartments, and a condensation minimizer.

A 1/3-hp. Tecumseh sealed condensing unit, with optional five year warranty plan, is utilized in both sizes.

Specifications on the new freezers appeared on page 20 of the May 25 issue of AIR CONDITIONING & REFRIG-ERATION NEWS.



BRILLIANT NEW DESIGN FOR EXTRA BEAUTY ... EXTRA PROFITS

VIKING



MAIL COUPON TODAY

For complete information

on the Viking #1010

KANSAS CITY 25, MISSOURI

Triple Deck Case

Check all the outstanding features of this new Viking Model #1010...a real best seller!

Sparkling Design—gleaming trim, smooth lines, Thermopane glass on front and ends . . . all provide eye-catching beauty, easy merchandising.

Huge Capacity—lower section holds 440 quart cartons . . . roomy second deck . . . extra display space on non-refrigerated top . . . 10 ft. long, 56 in. high.

Easily Extensible—no large partitions . . . no interference with bottom display.

Simple Service—lower shelf lifts out for easy access to electrical, refrigeration and drainage systems.

Perfected Cooling—features Viking's famous NORSAIR economy cooling system.

Please send complete information on Viking Model #1010. Address Zone State

7500 Wilson Ave., Kansas City 25, Mo.

Announcing the NEW, COMPACT AMERICAN-STANDARD PACKAGED AIR CONDITIONER

for commercial establishments

Here's a self-contained unit that comfort cools, dehumidifies, ventilates, cleans and circulates the air . . . also readily arranged for winter heating!

Note the

many advantages

this new unit offers your customers:

- 4-WAY ADJUSTABLE GRILLES discharge air at any angle above
- ADJUSTABLE FAN MOTOR PULLEY permits air volume adjustment to fit application.
- CABINET IS ACOUSTICALLY INSULATED for quiet operation.
- "HUMID WEATHER" CONTROL removes additional moisture from air on muggy days.
- HEATING COIL, using either steam or hot water, can be furnished at additional cost.
- ALL AIR IS FILTERED as it passes through the unit.
- CONTROLS ARE CONCEALED. Adjustable thermostat regulates air temperature. Fan can be operated separately without cooling.
- REFRIGERANT CIRCUIT is completely hermetically-sealed.
- COMPACT DESIGN saves valuable floor space. (dimensions shown for 2 and 3HP units).
- EASY TO INSTALL-conditioner is shipped ready for electrical, water and drain connections.

For further information, contact your wholesale distributor or send for Form No. 403.



American-Standard Dept. AN-63, Pittsburgh 30, Pa. Please send me Form No. 403 describing the Packaged Air Conditioner. Name Company Address City. State

American Radiator & Standard Sanitary Corporation, Pittsburgh 30, Pa.

Sowing home and industry

AMERICAN-STANDARD . AMERICAN BLOWER . CHURCH SEATS & WALL TILE . DETROIT CONTROLS . KEWANEE BOILERS . ROSS EXCHANGERS

18th IAEL Conference Set for August 5-8 In San Francisco

NEW YORK CITY — The International Association of Electrical Leagues announces that its 18th annual conference will be held Aug. 5-8, inclusive, at the Fairmont hotel, San Francisco.

This will be the first time one of these conferences has been held in the west, and a large attendance is expected, according to O. C. Small, corresponding secretary.

Among those scheduled to address the meeting are Walter H. Eichelberger, vice president in charge of merchandising, Major Appliance Div., Philco Corp.; G. C. Tenney, president, McGraw-Hill Co. of Calif.; Kenneth L. Hampton, manager, Valley Electrical Supply Co.; and O. R. Doerr, vice president, Pacific Gas & Electric Co.;

Other speakers will be Richard Oddie, Bank of America; Kent P. Stiner, BullDog Electric Products; R. R. Gros, manager, publicity and advertising, Pacific Gas & Electric; Walter J. Walsh, attorney; Edwin Fleishman, consulting engineer; and Charles Wellman, executive vice president, Glendale Federal Savings & Loan Association.

A one-day pre-conference excursion down the San Francisco peninsula is being organized by Pacific Gas & Electric. Set for Aug. 4, the trip will cover about 280 miles and culminate in a tour of the utility's giant new generating plant.

25-Ton Unit Spot Cools Studios' Posing Areas

NEW YORK CITY—Models employed by William Becker Studios, Inc., this city's largest commercial photographer, will find their jobs considerably more pleasant this summer.

A 25-ton packaged air conditioner has been installed to spot cool posing areas in the studios. The Worthington unit helped to solve the problem of cooling a posing area of 12 ft. by 12 ft., with a radiant light load of 100 watts per square foot, and at the same time keep air movement below the point where it would cause garment rustle.

Local Worthington distributor is Cort Mechanical Corp.

Frigidaire Appoints Chaney As Dealer In Dallas County

DALLAS—Frigidaire Sales Corp. has announced the appointment of Cecil Chaney as an authorized dealer in Dallas county for commercial refrigeration products and air conditioning units and equipment.

Chaney has been active in the refrigeration and air conditioning sales and service business in this area for many years.

The Frigidaire lines are on display in Chaney's recently remodeled store at 2040 Main.

CLEANABLE WATER-COOLED CONDENSERS MORE EFFICIENT DOUBLE-TUBE COUNTER-FLOW DESIGN "New unit" efficiency is always maintained with H & M water-cooled Condensers because they are cleanable—quickly, economically. Do as the industry does—demand nothing less, for the cost is no more. Write for Catalog. WHOLESALERS IN PRINCIPAL CITIES Halstead & Mitchell

BESSEMER BLOG . PITTSBURGH 22 PA

Juice Dispenser Next Gadget for Refrigerators?

LAKELAND, Fla. — An orange juice dispenser built in as a regular feature of household refrigerators has been suggested to refrigerator manufacturers by Florida Citrus Mutual, a co-op representing 7,000 Florida orange growers.

The dispenser should be "so constructed that the housewife would be able to empty a supply of concentrate into it and, at the press of a button, have a fully reconstituted orange juice," the growers suggested.

They are reported to be financing a \$1,000,000 program to enable manufacturers to experiment with and produce more types of juice dispensers.

Cool Goodrich Building

COLUMBUS, Ohio—A new onestory brick and steel major distribution center is being erected for The B. F. Goodrich Co., on Indianola Ave. near the northern city limits here. Approximately 12,000 sq. ft. will be devoted to modern, air conditioned offices.

TV Viewers Given Tips On How To Shop for Room Conditioner

CHICAGO — Local TV viewers watching a recent "Shopping with O'Reilly" program over WBBM-TV got some advice on how to shop for a room air conditioner.

Armand Zucker, director of design and products for Mitchell Mfg. Co., told viewers how to choose the proper size unit, what specific features to seek when buying a unit, and general advantages of air conditioning in the home.

Zucker dramatized the story of room air conditioning through the use of charts and props. Special emphasis was put on the dirt-removing functions of the units when he displayed a new filter alongside a blackened one used for two months.

The popular daytime show is designed to supply housewives with the advice of experts before they go out to shop. This was the first time that emcees Patrick O'Reilly and Lee Phillip discussed how to shop for an air conditioner.

Distributor Uses 'Sales-Mobile' To Get New Dealers and Educate Its Old Ones

LOS ANGELES—Dealers and prospective dealers of Horn & Cox, Inc., southern California appliance distributor, don't have to go to the latter's showroom to see the products it carries.

The distributor is taking the products to the dealers via a leased 35-ft. semi-trailer and truck called the "Sales-Mobile." Painted yellow, red, and white, and bearing brand names in large letters, the mobile showroom is scheduled to visit every city of 2,000 or more population, except San Diego, in the distributor's area.

No trip will be wasted, according to John Paley, advertising and sales promotion manager. "Either we open a new dealer or we bring our franchised dealers up to date on latest merchandising techniques and new lines," he pointed out, in explaining that the Sales-Mobile program works like this:

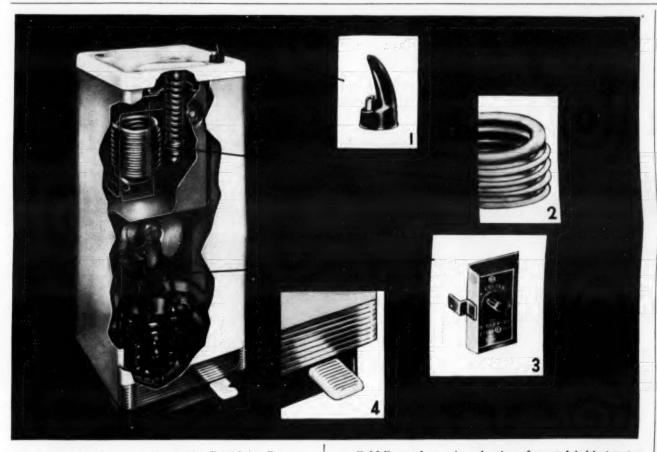
Appointments for use of the trucktrailer are made with Horn & Cox salesmen. Then, Paley and the salesman drive by auto to the retail store and confer with the dealer until the mobile showroom arrives.

Upon arrival, the Sales-Mobile is parked on the street or in a nearby lot, the doors opened, and portable stairs lowered to the ground. Stepping inside, the dealer sees operating models of major appliances and TV sets (power to run the products comes from a self-contained electric generator under the trailer).

The dealer can also inspect a full stock of electric housewares in the front of the trailer. He can then place orders for the big appliances and, if he wishes, take immediate delivery of housewares.

Cooperating manufacturers paid part of the cost of the Sales-Mobile, which has a sign on the front reading "Here comes Horn & Cox, Inc." and one on the back stating "You are following Horn & Cox, Inc., wholesale distributors."

FRIGIDAIRE SETS NEW PACE IN THE WATER COOLER FIELD



Look at these features that make Frigidaire Pressure Models a standout against any competition.

1. Magic Action Bubbler delivers uniform stream thick as 150 lbs.

2. Instantaneous "Flash" Cooling lowers operating costs up to 30% as water is cooled only as it's used.

Cold Control permits selection of exact drinking water temperature by simple setting of control knob.

4. Easy-Action Toe-Touch Pedal operates bubbler valve electrically—no mechanical linkage to wear out or break down.

And note the Anti-Splash Top of Lifetime Porcelain, so easy to clean and to keep clean.

A Complete New Line – Newly Designed Inside and Out – to Assure Record Sales

Five brand new models with a wealth of outstanding selling features give Frigidaire Dealers the greatest competitive advantage ever enjoyed in the Water Cooler business. Here's a full line for 1953 – three pressure type and two bottle type self-contained Water Coolers, all completely restyled and reengineered for top sales appeal and top performance. Here's new built-independability, economy and convenience that assure minimum servicing, complete satisfaction, and repeat orders.

Handsomely styled cabinets with clean, modern lines and neutral gray finish harmonize with any surroundings. Extra compact to occupy minimum floor space. Back of every Frigidaire Water Cooler is famous General Motors engineering that guarantees delivery of full-rated cooling capacities under all operating conditions. All units are powered by the Frigidaire Meter-Miser—the simplest cold-making mechanism ever built—famous for economy and trouble-free operation. It's quiet, never needs oiling or attention and is specially warranted for 5 full years.

It's a pace-setting combination of design and mechanical features that Frigidaire Dealers can grab and run with for greater sales, greater profits, than ever before.

New Pressure-Balanced Models Banish Squirt, Spurt, Spatter A score of new features are designed | It's the line that's built right and

A score of new features are designed to make sales and keep sales made. Automatic regulator compensates instantly for all pressure changes—stream is always constant—no dying down, no surging or spurting. New low drinking height puts water stream within easy reach, even for children.

Easy-to-clean lifetime porcelain top. Exclusive basin design eliminates splash and splatter. Incoming water coils bonded to refrigerant tubing for fast contact cooling.

Here are real "talking" points to make any dealer happy – to give real assurance of sales and bigger profits. priced right for volume in 1953.

Sales-Making Advertising Both the Pressure Type and Bottle

Both the Pressure Type and Bottle Type Models are backed up by a big advertising and promotion program geared to your market. Dynamic ads appear in Time, Newsweek and many other national publications reaching the people who buy from you.

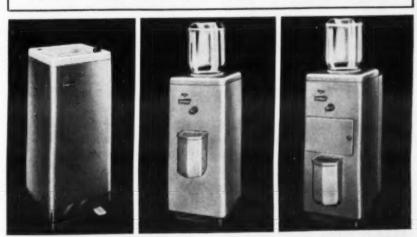
Other advertising and promotional material is ready to help dealers tiein locally through newspaper, display, and point of sale.

New Refrigerated Compartment in Exclusive Executive Model



Opens a whole new world of sales possibilities. Special compartment, with built-in lock, can be used to store food, beverages, drugs and other items. Makes 28 ice cubes in two handy Quickube trays. Holds quart bottles or up to 36 six-ounce bottles. Stores up to one gallon of ice-cold water. Easy action pushbutton shuts off automatically when released. Portable, needs no plumbing, plugs into any 115-volt outlet.

A FULL SELECTION OF TYPES AND CAPACITIES



Pressure Type Models are available in 6, 12, 18 gallon per hour capacities. Only 38% in. high, 16 in. wide, 16 in. deep.

Bottle Type Model without com-

partment cools 2 gallons per hour. Model with refrigerated compartment cools one gallon per hour. Only 39% in. high without bottle. 16 in. wide, 18% in. deep.



Bench-Type Industrial Test Chamber Can Pull Temperatures Down to -80° F. In 30 Min.



INDIANAPOLIS - A new, highlow temperature bench-type test chamber that will pull down to -80° F. in 30 minutes has been announced by the Industrial Freezer Div., Webber Mfg. Co., Inc., here.

Designed and developed primarily for a branch of the armed services, the unit is capable of extreme temperature ranges within a relatively short time. Temperatures range, on the standard unit, from -80° F., to 185° F.

Test chamber dimensions are 12 in. by 12 in. by 12 in. Over-all dimensions are 50 in. long, 26 in. high, and 20 in. deep. The unit is compact and has simplified controls. Equipped with aircooled compressors, the unit is quiet

in operation. Cabinet is of stainless

The application of heat is accomplished through the use of reverse cycle refrigeration. Controls formerly necessary are eliminated. A blower is provided for even distribution of temperatures and greater testing ac-

The door is a latch-type door which provides for complete removal of the door from the cabinet. This feature permits mounting component parts on a board affixed to the back of the door for testing. Holes may be drilled through the door to provide for electrical contacts.

A hinge type door is available with this model. Optional equipment includes electrical terminals, shelves, automatic temperature cycling and recording instruments.

The same model is available at temperatures from -100° F., to 250° F., without a change in cabinet

Webber manufactures a complete line of low-temperature industrial freezers and complete temperature range testing units to temperatures as low as -185° F.

Sunroc Co. Field Staff

GLEN RIDDLE, Pa. - Sunroc Co. here, manufacturer of water coolers, has announced two major appointments to its field staff.

Both men were formerly top sales representatives of Fedders-Quigan Corp., which recently withdrew from the water cooler field, Sunroc said.

They are Clyde A. Harris, formerly southeastern district manager for Fedders-Quigan, who has been appointed southeast division manager for Sunroc, with headquarters in Atlanta, and Earle S. Bates, formerly eastern district manager for Fedders-Quigan, who was named special field representative for Sunroc. Bates will have his headquarters in Glen Riddle and Washington.

These additions to the Sunroc sales organization are part of a planned expansion of its sales and service facilities.

Harris, at one time national sales manager for Cordley & Hayes, New York City, is well known in the water cooler industry and in merchandising in the southeastern states. With the opening of a district office in Atlanta, Sunroc will establish warehouse facilities there to take care of emergency requirements.

Bates, who received his engineering training at the Massachusetts Institute of Technology, was in charge of the Washington office of General Electric Co.'s Air Conditioning Dept. from 1945 to 1951. As special field representative for Sunroc, he will work with architects, engineers, and large national users in consulting on the design and installation of specialized cooler equipment.

Harris, Bates Added to 15-Ft. Display Case Gets Credit for Boosting **Locker Plant Meat Sales**

NEWARK, Del.-The sale of hundreds of pounds of meat weekly to both locker customers and general traffic resulted after a 15-ft. refrigerated display case was installed in the Newark frozen food plant here.

"If we hadn't installed this case," said George Lloyd, store manager, "we would never be selling the 200 to 300 lbs. that we are now averaging a week in delicatessen meats alone.'

Formerly, the locker plant did butchering and meat cutting to order. Noting a growing demand for meats in smaller quantities, the store manager decided to stock meat himself.

"Our case made it possible for us to display a variety of meats," Lloyd commented. "We not only got extra business from our locker customers but from others as well.

"Too many locker plants make the mistake of keeping their meat 'in the back' and taking it out only when customers ask for it. Incentive sales are a very important factor in selling meat today. With our case out front, sales have been great, particularly in delicatessen items."

In an effort to promote larger meat purchases, the plant offers customers a 10% discount on all such purchases totaling 10 lbs. or more.

Admiral Makes Commercial Farm Type 27-Cu. Ft. Freezer

CHICAGO - Admiral Corp. will make its 27-cu. ft. freezer available as a commercial model, painted gray and shipped without inner doors, William B. Doyle, sales manager of the freezer division, has announced. The price of the commercial model is \$699.95, a reduction of \$100 from the standard 27-cu. ft. freezer, he said.

The freezer has a built-in lock, inner light, and a battery operated buzzer to warn when the freezer is not in operation because of blown fuses, power failure, or other causes.

The new model is designed for all commercial institutions and for farm dwellers who need a large freezer for storing their own meat, fruit, and vegetables, Doyle declared.

Super-Cold Sales Decline In '52 But Income Rises

LOS ANGELES-Consolidated net sales of Super-Cold Corp. for the year ended Dec. 31 totaled \$7,032,350, compared with \$7,645,145 in 1951, and net income amounted to \$241,622, against \$90,736 for the preceding

Last year's net income was equal to 40 cents a share on 608,000 shares outstanding, whereas 1951 income was equal to 15 cents a share.

About \$785,000 of defense work production was delivered during 1952,

according to the company's report. Super-Cold also reported that Clement J. Melancon and William S. Bartmen have been elected to the board. In addition, Nicholas A. Kessler, president; Frederick Waingrow, executive vice president; David J. Davy, secretary-treasurer; and Albert Kessler and Maurice Schwartz, Jr. were re-elected.

121,000-Sq. Ft. Warehouse Planned for Omaha Co-op

OMAHA, Neb.-Plans to construct a 121,000-sq. ft. warehouse-office building, including a freezer area of 6,000 sq. ft. plus both dry and wet refrigeration for produce, have been announced by United Food Stores, a cooperative distribution corporation sponsored by 193 independent retail food stores in Nebraska and Iowa.

President E. E. Ashley said the structure will be on an 11-acre site in the 600 block on South 72nd St.

Cost figures are indefinite, he stated, but estimates place it in the \$1,000,000 category. L. E. Wilkie has been engaged as architect and it is hoped that construction will start this spring. The building will have concrete block walls with brick facing, a steel frame, steel roof deck, and concrete floors. The office section will be air conditioned.

There will be a roofed area for accommodation of seven freight cars at one time. Inside loading docks will accommodate 16 semi-trailer trucks simultaneously. Refrigerated storage lockers will open directly off the receiving docks for efficient handling of frozen foods and meats. All loading and parking will be off-street.

Ashley said the corporation will sell its present 50,000-sq. ft. warehouse at 4450 Commercial Ave.

IF YOU WERE Your Prospect which would sell YOU?



Feature Time Payments to close more sales with the COMMERCIAL CREDIT PLAN

ORE AND MORE prospects for commercial refrigerating and air conditioning equipment are becoming, of necessity, TIME BUYERS. Because of their cash position it's the only way many can buy your equipment. The COMMERCIAL CREDIT PLAN helps close sales . . . improves your cash position by avoiding accounts receivable. And you turn your credit and collection worries over to COMMERCIAL CREDIT. For complete details, facts and figures, write COMMERCIAL CREDIT CORP. 14 Light Street, Baltimore 2, Md. or our nearest office.

COMMERCIAL CREDIT CORPORATION

A service offered through subsidiaries of Commercial Credit Company, Baltimore ... Capital and Surplus over \$125,000,000 . . . offices in principal cities of the United States and Canada.





Promote your own condensing unit sales with Filtrine's 20-year-life construction . . . high capacity . . . Super Storage . . . more than capacity . . . Super St 40 years' dependability. COOLERS FOR MESS HALLS - CAFETERIAS

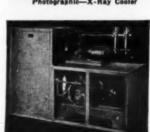
Conform with Fed. Spec. 00-C-566b

COOLERS FOR X-RAY & PHOTOGRAPHY

PACKAGED CIRCULATING CHILLED WATER SYSTEMS

Mess Hail-Cafeteria Coole





Typical "Packaged

Sell your condensing unit with Filtrine Stainless Steel or Duco finished cabinets, equipped to suit with top/side shelves, bubblers, glass-fillers. Can be Taste-Master equipped to remove chlorine.

REMOTE COOLERS FOR ALL USES



rust, sediment from water. Sell your condensing unit with Filtrine models repeatedly named by V.A., Signal Corps, Air Force, etc. for X-ray and photo-labs. Under counter design and floor-mounted models with stainless steel work-table top. Filters (extra) to prevent scratched and pin-holed

Sell your condensing unit! Systems for drinking or processing water-completely packaged with pump, controls, your condensing unit factory installed. Capacities 5-400 g.p.h.; storage 5-150 gals. Filters and Rectifier-Dechlorinators (extra) to insure tastefree, sparkling water.

Sell your condensing unit with remote models for new and replacement jobs-all applications. Capacities 10-1000 g.p.h.; 7-300 gals. Filters, Rectifier-Dechlorinators available for all sizes.



Write for catalog and Specification Guide



FILTRINE MANUFACTURING COMPANY . BROOKLYN 5 . N. Y Water Coolers and Filters for 40 Years"

INSIDE DOPE by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

Summer Gags of the Week

Wanna winna bet?

Tell a cohort it's so hot you spend all your time wiping transpiration off your face.

"You mean perspiration," he'll argue. "Transpiration is what you come down to the office in a bus on."

Bet him. Unabridged dictionaries define perspiration as a form of transpiration.

An office is like a Robinson Crusoe island. Bulk of the work is done by Friday.

The Russian Problem and Businessmen

From a recent speech by Louis Ruthenberg, Board Chairman of Servel:

"Since 1928, Russia's annual steel production has risen from 5 million tons to 35 millions; her coal production has increased almost tenfold. Oil production has risen from less than 100 million barrels to more than 300 million, electric output from a negligible amount to about 125 billion kilowatt hours. All indices of Russian industrial growth continue sharply upward.

"There is no point in comparing our own superior industrial capacity to that of Russia because, under Russia's economy, her industrial resources can and are being almost completely channeled into war production, whereas our own vast industrial capacity is used for the production of automobiles, radios, television, refrigerators, bath tubs, and all the other goods that enter into our amazingly high material living standard.

"Production for civilian consumption in Russia has advanced inperceptibly since 1928, whereas in the same period her military spending has advanced from an index of 100 per capita to an index of 2,750 per capita. Russia's 1951 production of excellent war planes is said to have been four times as great as our own.

"To a very great degree we, the people of the United States, made her what she is today. American engineers and industrialists built Russia's pre-war industries. After Germany attacked Russia, her former ally, we aided Russia without stint. Some 11 billions of American money built up Russian war industries and provided her with war material. The concessions at Yalta gave Russia everything and more than she had hoped to gain in her abortive war of 1904 against Japan.

"After the war, with our aid and approval, Russia acquired German industrial assets of incalculable value, including the world's most proficient aircraft industry—airplane designs, manufacturing equipment, scientific, technical, operational, and flying personnel. From England, Russia received the jet engine, which her German and Russian engineers have greatly improved.

"The timing and extent of Russia's future aggression seem to me to be quite unpredictable. So far, she has gained her objectives very economically without open, major warfare. Her first phase of expansion has been accomplished. Presumably she needs time for consolidation of her greatly increased land areas and population. If or when that consolidation is accomplished—what next?

"Just now, Russia's rulers may be preoccupied to some extent by internal difficulties. If Russia's internal problems become very acute, she may engage in warfare in order to maintain the dictatorship. Throughout history many wars have taken place for that reason.

"Stalin is dead. What policies will Stalin's successor adopt? Such questions, of course, are unanswerable. As long as such questions cannot be answered, it seems to me that we must accept the fact that the timing and extent of Russia's future aggressions are unpredictable. We must prepare and condition ourselves for any eventuality.

"Traditionally, industrial management has been principally concerned with the successful manufacture and sale of goods and services. The old pattern of management functioned well. None can challenge its successful accomplishment in making and selling goods. So well has this job been done that our country has achieved the greatest material wellbeing for its average citizen ever realized in the world's history. Dimly conscious as management has been of its broadening social obligations, it has performed a great social service. The high living standard of the American people is the good fruit of management's concentration upon the arts of making and selling goods within the frame of competitive capitalism.

"But management's preoccupation with its traditional arts, its tardy recognition of broader social obligations, have permitted destructive forces to develop frightening magnitude and momentum.

"Competitive capitalism has amazing vitality. Under its influence, national wealth and material well-being have continued to advance, notwithstanding increasing pressure of many opposing forces. It is apparent, however, that, notwithstanding its great vitality, free enterprise may be nullified through the cumulative effect of erosive forces. Since the turn of the century, management has been increasingly but insufficiently aware of its dilemma.

"Shall business management continue to concentrate on its traditional arts, or shall management, without failing to progress in those arts, accept the challenge and assume all of the burdens and risks involved in earning social and political leadership?

"Too few men of management have realized that, unless they diligently followed the second course, their places will be usurped by political bureaucracy. But even now, in this fifty-ninth minute of the eleventh hour, the wayward course can be arrested and reversed. Admittedly, the task is infinitely more demanding and urgent than it would have been earlier. But this is not the time for frustration and defeatism. We face a challenge that should inspire courage and audacity. A new Declaration of Independence is in order.

"I say that the nation's wayward course can be arrested and reversed because we have before us many examples of imaginative, constructive business leadership that clearly point the way. Such leadership must be quickly followed, emulated, and multiplied. Thousands of business executives must understand our economic, social, political problems, must resolve to assume the burdens and hazards of leadership. They must become clearly articulate. Their voices must be heard from above the clamor of confusion and demagoguery.

"It is the plain and inescapable duty of all American businessmen to devote their strength and ability to the support of able and unselfish leaders in government. We must understand our complex economic, social, and political problems. We must resolve to undertake the burdens and hazards of leadership. Our voices must be heard above the clamor and confusion of demagoguery.

"Then and then only can we look forward with calm confidence to the certainty that our government will meet the great domestic and world problems that it faces. Then and then only can we look forward to a happier day of unity and peace.

McGowen Bids Low on Georgia Health Center

BRUNSHWICK, Ga. — McGowen Construction Co., of Macon, has submitted the low bid (\$118,978) to build what is believed to be the first fully air conditioned health center in Georgia.

According to a spokesman for the State Health Department, the Mc-Gowen bid amounted to less than \$16 a square foot, about \$2 under recent bids for similar projects elsewhere in the state.

McQuay, Inc. Appoints Chicago Area Distributor

MINNEAPOLIS — A. B. Bayer, manager of the refrigeration division of McQuay Inc., has announced the appointment of Automatic Heating and Cooling Supply Co., division of Weil-McLain Co., as the authorized distributor for McQuay Refrigeration Products in the greater Chicago Area.

Automatic Cooling & Heating Supply Co. will maintain a stock of McQuay refrigeration products in its Chicago and Hammond branches.

'Styrofoam' Outlet Named

MIDLAND, Mich.—The Sherman W. Putnam Organization, Inc. of Chicago has been named a distributor for "Styrofoam" (Dow polystyrene), it was announced by A. R. Tucker, head of Styrofoam sales for The Dow Chemical Co. here.

Coleman Net Sales, Net Earnings Rise for Quarter

WICHITA, Kans.—Net sales of \$13,209,245 in the first four months of 1953 have been reported by The Coleman Co., Inc., manufacturer of home heating and air conditioning equipment and gasoline pressure appliances. Sales in the corresponding period last year were \$13,135,062.

Earnings were \$766,108 or \$1.85 a share of common stock compared with \$570,702 or \$1.37 a share for the first four months of 1952.

Sheldon Coleman, president and general manager, said sales were at a satisfactory level throughout the first four months and should increase as deliveries of the company's new Blend-Air home air conditioning units accelerate. Further easing of the materials situation, particularly steel, should bring about a corresponding increase in the production of home heating units.

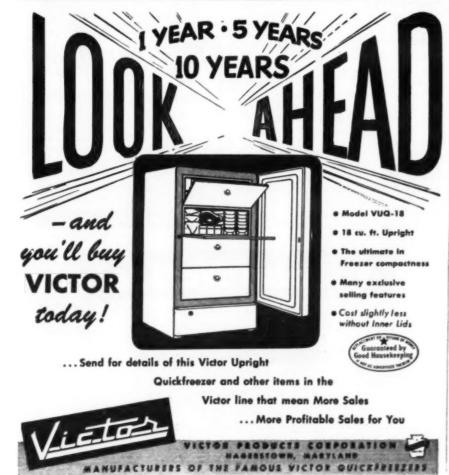
Military production, which accounted for approximately 27% of total sales volume, was reported on schedule. The company has a backlog of about \$15,000,000 in military orders, chiefly components for the U.S.A.A.F. B-47 jet bomber.

New officers elected were W. C. Coleman, chairman of the board of directors; Sheldon Coleman, president and general manager; Clarence Coleman, vice president and assistant general manager; Carl L. Burrows, vice president in charge of sales; Boyd Tullis, vice president in charge of engineering; C. B. Kuhn, treasurer; J. A. Dye, assistant secretary and assistant treasurer; H. H. Minard, assistant treasurer, and F. Wayland Richards, assistant secretary.

AIR CONDITIONING



MANUFACTURERS OF HEAT TRANSFER EQUIPMENT SINCE 1923



Selling Room Air Conditioners

Time, Effort, and Money Are Important In This New Field In Which Dealers Are Advised To Either Get In Wholeheartedly or Get Out

BOSTON — Five recommendations to guide dealers in selling room air conditioners, based on the experiences of successful retailers "in markets where air conditioning is already big business," were offered recently by Austin Rising, vice president and general sales manager of The O. A. Sutton Corp.

Rising made the suggestions, and reported what successful dealers have to say on the subject, in a talk on "How To Sell Air Conditioners" at the air conditioning meeting of the Electric Institute of Boston. His recommendations were:

Time and Money Necessary For Big Profits

"1. Recognize the very large profit potential that exists in the air conditioning business and become enthusiastic over getting your share of it. You will get from this business exactly in proportion to the energy, ability, and time that you devote to it and no more. If you want big profits, you must devote time and money to it.

"2. Get in or get out of the business. Don't just put a unit on your showroom floor and expect it to sell itself. This helps neither you nor the manufacturer or distributor who are anxious to build up a group of hard-hitting dealers who want to work on getting air conditioning business.

EVER DEVELOPED

"3. Profit from the experience of successful dealers.

"Organize properly to handle the functions of: manpower, sales programs, advertising, service and installation. To accomplish this it will take much thought, planning, and energy on the part of you owners and managers, as well as creating enthusiasm within your selling organization. You are not just selling a piece of merchandise. You are selling an idea and the benefits that will accrue from its use and you are trying to do this on a mass market basis.

"Avoid the pitfalls which have been pointed out to you as a result of the experiences of others. Install the unit properly to begin with, sell the proper size unit, regardless of whether the customer thinks he wants a smaller or cheaper model, and be sure the voltage characteristics are adequate before you leave the sale.

"4. Handle the correct number of lines to suit your own operation. Select the lines carefully . . .

"5. In your advertising and sales promotion plans remember to tie them in with a specific program. In preparing your advertising keep these points in mind: The product can be used the year round; the customer must be sold the idea of air conditioning; start your sales program early."

Leading up to these recommendations, Rising related in detail information obtained from successful dealers

THE MOST ADVANCED FILTER-DRIER

in various parts of the country.

"We got information," he pointed out, "from Houston where 19,000 room air conditioners were sold in 1952; from Memphis, where approximately 6,500 were sold; from St. Louis where 8,000 were sold; from Wichita where between 4,000 and 5,000 were sold; and from Philadelphia where approximately 12,000 were sold.

Successful Dealers Interviewed

He said dealers visited included Wylie Sinclair, president and owner of Acme Airco in Houston; Lou Nachman of St. Louis; Mort Farr of Upper Darby, Pa.; Wallace Johnston of Memphis, Tenn., president of NARDA; Emerson Dole, owner and manager of a number of retail appliance stores in and around Wichita, Kan.; Harry Price of Prices, Inc., in Norfolk, Va.; and Charlie Gerhard of Glenside, Pa.

"Cumulatively, these dealers sold over 2,500 room air conditioners in 1952," Rising noted. "The only reason they did not sell twice as many units in 1952 was because of the extremely limited supply. Each one of these dealers is planning on at least doubling his business in 1953...

We asked each of these dealers for his opinion of the ultimate potential of room air conditioners as compared with the potential of household refrigeration.

Market May at Least Equal Refrigerator Volume

"A summary of their opinions is that the air conditioning market will at least equal the potential of household refrigeration and could very well double or triple it, because of the use of multiple units in homes, offices,

"These dealers feel that the market will develop four or five times as fast and that it will take approximately four or five additional years to reach where the household refrigeration market reached in 20 years.

"Charlie Gerhard of Glenside, Pa. says that right now he is selling considerably more air conditioners than refrigerators and he is extremely bullish on the future.

Reasons for Buying Vary In Different Areas

"You may wonder how many sales are made around the country for cooling purposes as compared with sales made for other benefits of air conditioning. Frankly, the answer to this differs depending on the location of the dealer.

"In the south, approximately 90% of the units are being sold for cooling purposes and 10% for uses other than cooling, such as dehumidification, health reasons, etc. In the central portion of the country about 80% of sales were for cooling purposes and 20% for reasons other than cooling.

"In the case of Charlie Gerhard, he indicated that between 25% and 30% of his sales were for purposes other than cooling so you can see that as you move north at the present stage of the market, a greater percentage will be for other than cooling and that it is possible to sell units for these benefits. As time goes on, more and more air conditioners will be sold for uses other than cooling.

Rising continued: "Selling air conditioners is different from selling refrigerators or other major appliances.

Mort Farr says, 'Get in or get out.'
Don't just put one unit on your floor
and expect it to sell itself. In a new
market like this you have to work
and work like hell, but when you get
it rolling, it is worth it.

"He says, establish yourself now in air conditioning. The sales you make now will return many fold later. If you become known now as a good air conditioning house, you will naturally get the benefit as the market expands in your area.

Idea of Air Conditioning Must Still Be Sold

"Remember, the idea of air conditioning still must be sold, in addition to the benefits of a particular make. This is always true in any industry with approximately 1% saturation and so your sales plan should be keyed into this knowledge.

"Lou Nachman in St. Louis, for example, says sales start in the bedroom. Now, we did not ask Lou exactly what he meant by sales starting in the bedroom, but one interpretation would be that the first unit in a home would be bought for the bedroom and that because of the living comfort obtained from this unit, other purchases would be made for other bedrooms, living rooms, dining rooms, etc.

Manpower Programs Vary

Rising next considered the question, "What about manpower to sell air conditioners?"

"The answer to that," he said, "is not clear-cut. A great deal depends upon your operation as it exists today and the future you plan for your organization.

"Some of these dealers, Nachman in St. Louis, Sinclair in Houston, and Gerhard in Pennsylvania, are air conditioning specialists who concentrate on air conditioning, although they do sell a few other appliances as well.

ell a few other appliances as well.
"Others, like Mort Farr, Harry

Price, Wallace Johnston, and Emerson Dole are primarily appliance dealers who have organized to get a good portion of the air conditioning business in their areas, but not to the detriment of their other appliance business.

"The specialists have men working on air conditioning the year round. They sell commercial air conditioning as well as room air conditioning and usually in the fall, from September to December, will put some of their crew on television or some complementary appliance.

"They usually call their men sales engineers and in most instances insist that their men call back on customers after their air conditioning has been installed. They give the customer any necessary instruction to properly operate the unit, but primarily they are there for other leads from friends, relatives, business acquaintances, etc. from these customers.

Air Conditioners Are Natural Complement to TV

"Mort Farr points out that air conditioning is a natural complement for any dealer who is in the television business. This is true both sales-wise and servise-wise.

"Almost without exception these dealers have taken men who have sales experience and taught them how to sell air conditioners rather than taking an engineer or men with previous experience in the technical end of air conditioning.

"A good share of Wallace Johnston's volume comes as repeat business from his regular appliance customers. They use the same manpower to sell air conditioning as sell other appliances and have been able to integrate it well into their organization.

Who Are Best Prospects?

Next Rising said, "let's ask ourselves, 'Who are your best prospects?' "

"This won't take much time to nail down. I might say that if, as it seems, all dealers have the same idea that doctors, dentists, lawyers, and other professional people are good prospects, these good people are sure going to catch hell through the mails this summer.

"Professional people are considered by all these dealers to be an excellent source for live leads and good because after they work in air conditioned offices, they are naturals for sales of units in their homes.

"A close second is your list of regular customers. These people know you, they know how you do business, the service you give them, and are naturals to be solicited for air conditioning business.

Contact Neighbors on Each Side of User

"Then, don't forget the previous buyers of air conditioners. They are probably the hottest group of prospects for the purpose of selling additional units.

(Concluded on next page)



Check Super-Flo advantages against any other liquid-line filter-drier

DEPTH FILTERING: A massive fiberglas bag, with unsurpassed depth filtering efficiency, removes unprecedented quantities of even the most minute foreign particles. As a safety bonus, a 30x150 mesh Dutch weave outlet filter stops all particles larger than .0046".

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Special Notice!

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Get an early lead by adding this low cost, profit-producing appliance to your line NOW! Write for complete information:

Glycolator, Dept. A-5, Valencia, Pa.

Selling Room Air Conditioners--

(Concluded from preceding page)

"Emerson Dole insists that his salesmen call on neighbors on each side of their users, because he is confident that they will have been exposed to the benefits of air conditioning.

"Selected neighborhoods are recommended by Lou Nachman. He covers particular areas which are heavy with apartment houses and has been quite successful in pinpointing his sales efforts in this manner...

"Emerson Dole concentrates on his regular customers as air conditioning prospects. When they have only a few payments left on another appliance, a salesman goes to work, softens them up, and tries to add on a sale of an air conditioner to their present contract. This calls for no down payment which, of course, helps.

"Charlie Gerhard points out that the bulk of his sales go into homes. So you can see that room air conditioners are no longer a commercial and semi-industrial market.

"As you would expect, the best way to sell any prospect is by personal contact. However, you can't contact everyone in person who might be a prospect. Direct mail is considered to be one of the best means of locating these people and, of course, if you use direct mail, remember two things. Select your mailing list carefully and be certain that the mailing piece is designed to appeal to that particular list.

Telephone Canvass Develops Leads for Salesmen

"Lou Nachman has a girl who is an excellent telephone canvasser and she gets on the phone from 8 to 11 in the morning. She 'conducts a survey' to see who has air conditioning, whether they have ever had the benefits explained to them, etc. This one girl in three hours develops enough leads to keep three salesmen busy with prospects.

"Mort Farr has a man contact previous air conditioning purchasers to check to see how their unit is running and whether their filter needs to be replaced. This gets his foot in the door to sell other units and also get to the prospects. It is as simple as that and it works.

"Price, Johnston, and Gerhard appeal to Mr. & Mrs. Average Home Owner and like to develop their leads through advertising.

"Harry Price says, 'We smoke out live leads and then, brother, we live with them.' Harry, of course, is a great exponent of contests among his men and there is hardly a time when some kind of contest isn't going.

Rising then took a look at special promotions which have been used by these dealers:

"Probably the first of these specialized programs which should be mentioned is the free home trial. This has a pitfall or two that must be carefully watched, but on the whole has been extremely successful in getting prospects and selling air conditioners.

Lou Nachman is particularly enthusiastic about this one. He uses this promotion during the hot season and features this program in his advertising. On the basis of 'free home trial—prove it to yourself at no cost,' his plan is a three-day free trial and in addition to advertising in the newspapers, he sends out direct mail

Over 9,000 REFRIGERATION Television, Radio, Heating,

Electric Motor, Air Conditioning

Yes, get it and save money

The HARRY A

Write Now to

PARTS and Supplies

WHOLESALE

SPRING and SUMMER...No. 158

and telephone to push it.

"Wylie Sinclair, on the other hand, favors a rental plan. This promotion is featured in newspaper ads, direct mail, and radio and television programs. Upon inquiry by a prospect, both the rental plan and easy payment sales plan are explained and many rental prospects actually elect to purchase an air conditioner rather than rent.

"Wylie also uses a free home trial plan and uses ½-hp. units for installation for use as home trial units. This eliminates any wiring problem and is usually sufficient to enthuse the potential customer within a short period of time that he desires permanently the benefits of air conditioning.

Payments Required Only During Cooling Season

"Harry Price features an unusual payment plan as his means of developing leads. This plan provides for a minimum payment down and three years to pay, with payments being made only during the summer months in which the unit will be used.

"Charlie Gerhard has found his Christmas and vacation plans to be the means of developing his air conditioning program. In these vacation plans a club is formed and the ads usually break just after the beginning of January.

"On this basis the ads feature the idea of a guaranteed five-year vacation and customers are invited to inquire concerning the program. They are then sold the idea of paying \$3 down and \$3 a week so that by May they will have sufficient down payment to have the air conditioner installed. Actual vacation group books are issued by which the customer remits weekly and sends a stub for his payment on the plan.

"Wallace Johnston, on the other hand, uses no spectacular sales program and to use his own words, 'Just plugs along.'

Lets Competitors Have Cut-Price Sales

"If a customer is looking for cut price or long terms, Johnston lets the competitors make the sale. He is an enthusiastic advocate of the dealer giving service to the customer and justifying his existence on this basis and Johnston sells sizable quantities

of room air conditioners.
Conditioning, Rising asked: "Now what about advertising? How much of it should you do? What media should you go in? How frequently should you advertise?" Answering these questions, he said:

"The amount of money you spend for advertising will generally depend on your particular operation, your operating costs, how much money you want to make on air conditioning, and the cooperation you get from distributors and manufacturers. Remember, you are making an investment for the future and you should advertise sufficiently to carry the sales program set up by you.

"The media you use, again, will depend on your particular area. Most of the dealers contacted indicated that approximately 70% of advertising funds would be spent in newspapers, with the balance in radio and television, billboards, car cards, etc.

"Ads on air conditioning should be 3-col. by 8, or 3-col. by 10 as a minimum, and, of course, the more spectacular the program you are running, the more spectacular your ads will be.

"In addition to straight dealer ads there is, of course, the dealer listing ad which lists the dealers in a city, community, trading area, or whatever the particular unit should be."

Service and Installation

Regarding the question, "Should you handle service and installation yourself?" Rising had this advice: "The answer is absolutely yes, if at all possible.

"All these gentlemen are very vigorous in their statements that the only way you can really give proper service and build good will is to handle your own service and installation and it isn't a big job to arrange for this. Your normal crews for installation or service consist of two men, one experienced air conditioning man and a helper.

"Harry Price says that the only answer to cut price competition is giving good service and that is one of his strong points. Wallace Johnston sells service all the way.

"Mort Farr points out that three normal TV crews can be converted into six air conditioner crews by the addition of six helpers. Mort also warns—take an extra ½ hour to install a unit properly in the first place. This will ultimately save time in service calls.

"Perhaps you have heard of the salesman in New Orleans who makes good use of 'Willie,' a panting, old trade-in who is used to overcome price objections, for free trial installations, and so far has always resulted in the sale of a new air conditioner every time Willie was used, while at the

ROOM COOLER NEWS

same time being good enough to convince the customer of the benefits of air conditioning.

"Lou Nachman relies hard on his capable service and installation crew. On July 17, 1952 he inserted an ad in the St. Louis Post Dispatch featuring in strong headlines the idea, 'If you are one of those people waiting without success for installation or service of an air conditioner by some distributor or dealer, call Lou Nachman right now'."

Here, Rising reviewed the rules, developed by ACRMA, which should be followed in making the proper air conditioning installation.

Noting other things dealers should do, Rising said:

"The successful dealers all say that the units should be sold at full list price.

"Without exception a survey should be made before each installation. This is a matter that is very simple once it is explained to you and will take a salesman a very few minutes to measure each area to see the proper size unit required.

"One other thing, showmanship, is a very important element in selling. One dealer in Wichita put perfume in the filter of the air conditioner of his store and when customers remarked about it he mentioned to them how it had been accomplished and used this as an entree to get the customer over to a room air conditioner and give

them a product story.

"At the same time, he gave the customer a very small bottle of perfume as a courtesy for their having noticed the perfume and for extending him the courtesy of listening to a demonstration on the room air conditioner. This developed some real live leads which were followed up diligently and converted to sales.

The Sutton executive also looked at "a few pitfalls you should watch out for

"Don't oversell the capacity of the unit. Engineer the job right in the first place. One of your biggest headaches will be customers who come in and want to buy a certain size unit or a certain priced unit. Do your selling job now and convince him of his need for a particular unit rather than what he presently thinks he might need.

"Have your salesman survey every sale before the unit is delivered. Be certain you comply with all code requirements when making installation.

"Voltage should be checked to be certain that you are getting adequate voltage to have the unit perform properly. Low voltage will result in improper performance; the unit may cut-out and your customer is bound to be dissatisfied. If there is a voltage problem, tell the customer and either have a separate 115-volt line wired in or run a 230-volt line in."





Men folks worked from sun to sun...but Mother's work was never done...in the 90's. Wash days added to her burden...she spent many hours toiling near a hot, kitchen stove.

The electric motor has worked miracles to relieve mankind of time-consuming, laborious tasks and provide for the living standards we enjoy today.

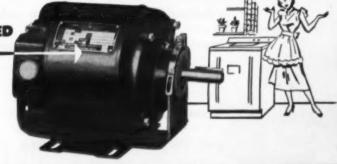
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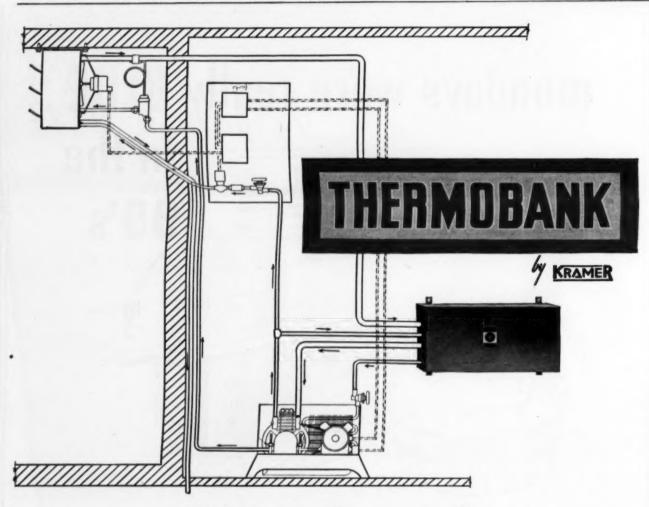
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"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."-Charles A. Dana.

Are Room Cooler Manufacturers **Kidding Themselves Today?**

(Concluded from Page 1)

can get a larger percentage of the total business, and has scheduled his production accordingly.

Result: More than 1,000,000 room coolers will be produced this year unless several manufacturers call a halt quickly.

How do we know this? There's a simple way to check. Each room cooler must have a compressor. Six manufacturers-Tecumseh, Copeland, Frigidaire, Chrysler, York, and Servel-supply the bulk of these units. Firm orders on the books of these firms for room cooler compressors—add up to considerably more than a million units deliverable before midsummer.

Let's take Tecumseh-acknowledged everywhere as the largest producer of compressors—as an example. Tecumseh not only powers one-third of all household refrigerators and three-fourths of all freezers, but has a big stake in the fledgling room cooler field. Based on the original estimates of its customers, Tecumseh geared up to produce another half million units for room coolers in 1953. The tooling, plant-building, etc., required a \$2,000,000 investment.

What happened? Original estimates pyramided. Enormous pressure was brought to bear upon Messrs. Herrick, Smith, and Brown to increase and speed up deliveries. Tecumseh prides itself on giving its customers what they want when they need it. Their shifts have been working around the clock seven days a week to supply this piled on top demand of room cooler manufacturers. Tecumseh machinists (who enjoy an incentive system of pay) have been earning, in many cases, well over \$200 a week. And, as a Tecumseh spokesman puts it:

"Our overtime and incentive costs have risen so rapidly that we're doing the equivalent of stuffing dollar bills into our com-

Tecumseh alone will have shipped 600,000 compressors to room manufacturers by the time you read this. Mind you, that figure of 600,000 was the industry's best estimate of the total sales possibilities for room coolers in 1953.

According to a Tecumseh spokesman, they are already committed on an expansion program well in excess of \$2,000,000 to take care of the increased demand, and to effect considerable savings in cost of compressors for the air conditioning industry.

Tecumseh will be able to deliver at least twice as many compressors for the air conditioning industry as the industry estimate for 1953, as a result of its \$2,000,000 capital expenditure

Furthermore, other condensing unit manufacturers are experiencing a similar situation. The coil people are 'way behind in fulfilling these pyramided orders. So are the fan and motor producers, and the intricate controls suppliers.

Nor is that the end of this "spring madness." Orders for these components are showing up through July, August, and September!

One component manufacturer estimates that 1,300,000 room coolers may be produced before football season starts!

Look, fellas: Nobody has promoted air conditioning so hard as AIR CONDITIONING & REFRIGERATION NEWS, and nobody believes more in its shining future than we. But everybody can't get 20% to 35% of the market this year. And a lot of our subscribers are going to be hurt unless you reappraise your production schedules.

Home Air Conditioning: To Succeed It Must Be (1) Sellable, (2) Easy
To Install, and (3) Cheap, Builder Believes To Install, and (3) Cheap, Builder Believes

BETHLEHEM, Pa. — Residential air conditioning has to be (1) sellable, (2) installed easily without interfering with the structure or other trades, and (3) cheap.

That's the opinion of N. A. Cole, Austin, Tex. builder, who spoke at the Technical Conference on Yearround Residential Air Conditioning sponsored here recently by Lehigh university's Mechanical Engineering department.

"The public is ready for air conditioning, the builder is interested, but we want to have it made easier for us," said Cole, who represented the National Association of Home Buiders.

"When these things come to pass, you'll sell 10 times the amount of air conditioning," he told the nearly 200 persons representing all groups interested in this field who attended the conference.

"We think residential air conditioning is quite vital and important. The home building industry has exceeded \$10 billion a year for several years, and we're gratified that the air conditioning industry has now recognized the market represented by residential air conditioning.

"We have many questions, however, which have not been answered by the air conditioning industry," Cole declared.

STARTED ON WRONG FOOT IN 1948

Citing earlier attempts to introduce residential air conditioning. Cole commented, "we started out on the wrong foot in 1948, but we got rolling again last year."

One of the things that went wrong in 1948, he indicated, was the attempt to hold an "open house" demonstration of residential systems in the middle of summer in Texas. The crowds jamming into the homes proved too much for the small sys-

"Reports of people who visited these air conditioned homes showed 50% weren't satisfied," Cole said.

"Today," he continued, "we're using overhead duct distribution systems and compression type cooling units. High wall and ceiling registers are the trends. We ourselves prefer ceiling blenders because we don't like to cut through our double top plates

QUALITY

to install wall registers. Neither does FHA in some areas.

TREND TO AIR-COOLED CONDENSERS?

"The trend is to a single central return, and there is also a trend to air-cooled condensers. In many areas water is quite a problem and the cooling tower is not a beautiful thing.

"Our engineering consists of figuring 1 ton per 500 sq. ft. of space as the maximum. Generally, this works out just as well as the more complicated engineering. It works," Cole "because manufacturers asserted. don't make compressors of this size in ¼ ton increments.

"We use bankers' engineering, and we're highly skeptical of air conditioning engineers' calculations. In too many cases, these are based on things that aren't always done.

"The general trades we work with aren't accustomed to working accurately. They may make a mistake and install a window 4 ft. away from where the plan showed it was to go. Then the register, which went in according to plan, that was supposed to be directly over the window to offset its effect on the cooling load,

BUILDERS USUALLY USE LARGER UNIT THAN RECOMMENDED

"We builders always expect things to go wrong like that. So when you air conditioning people tell the builder the house needs a 2-ton unit, he'll put in a 3-ton machine.

"Lots of times workmen forget to put in insulation, or they don't put it in all the stud spaces. Sheet metal men, the plumbers, or the electricians may pull the insulation out and no one bothers to replace it," Cole

He also pointed out that operating cost of residential air conditioning can be an important factor, especially with respect to financing.

"Present trend is to limit the operating cost of year-round air conditioning to \$10 per month for the average home costing up to \$15,000. This figure includes maintenance, too.

"The people who loan money for mortgages have set up the basic rule that a man's rent should not exceed one-fifth of his income. There's another gimmick here in that if the person also owes money on his car, etc., that is subtracted from his net income. The utility costs must also be subtracted from his net income. Here, of course, we're talking about new construction, not existing homes," Cole explained.

"And on initial cost, there is almost a mandatory limit of \$500 per ton, including the heating.

On the subject of changing home designs, Cole said that "manufacturers have asked us what we could do in the building to make it easier for air conditioning.

"The basic answer," Cole declared, "is nothing.

"One thing air conditioning manufacturers have asked for was high windows protected by overhang. But we builders aren't going to give up the picture window (now we call it the 'window wall'), because it sells houses. We are going to overhang, but to meet the needs of our customers. These and other gimmicks are used for sales appeal. If they help air conditioning also, that's fine.

"Manufacturers told us they also wanted 4 in. of insulation in the ceiling instead of 3 in., and 2 in. in the side walls. They also want doubleglazing.

"We were first told," Cole recounted, "that double-glazing in the average house would save 1 ton of air conditioning. Then another engineer said that if windows are already shaded (which ours are), doubleglazing wouldn't help that much. So what are we to do?

'We builders want to know for certain if double-glazing is good for



cooling. Builders are going to use the overhang, but how much exactly does this help air conditioning?"

'HOME BUILTS' A FAILURE

Although Cole gave an over-all impression of skepticism toward the air conditioning industry, he did admit that attempts to build his own air conditioning units weren't too sucess-

"The trouble was," he said, "I installed 20 of them. They've already cost me \$720 per ton so far."

Something else Cole would like from the air conditioning industry is a "one-stop installation," he com-

"Our industry, unfortunately, is made up of various trades, and we're sick and tired of dealing with them. And now the air conditioning contractor is coming out with his brace and bit and saw to hack up our build-

According to Cole, installation of air conditioning in a home first calls for a visit by the engineer who "wastes an hour or more of our foreman's time while laying out the job. Then the installers will come out and get everything in except two registers which they forget. They'll be back in two or three days to install these. And then later the system will have to be started up and balanced.

"In all, several trips have to be made before the air conditioning system is installed and accepted. When a man and one helper can put it all in in just one morning, we home builders will buy a lot more.

"At heart, every builder wants to do a good job, but speaking for the NAHB, we still want a lot of answers on air conditioning. We recognize, though, that air conditioning is a tool we can use very effectively to sell our product."

AGA Offers Sales Aids In Air Conditioning Campaign

NEW YORK CITY-All-year, allgas air conditioning and house heating is being promoted during May and June by the American Gas Association in cooperation with Servel,

Spearheading the sales drive, AGA is making available to utilities and dealers a full promotion kit, booklets, and newspaper art elements. The material includes two display cards, two banners, two promotional booklets, a salesman's manual, advertising mats, promotional portfolios, and broadsides. All can be ordered from the Promotion Bureau, American Gas Association, 420 Lexington Ave., New York 17, N. Y.

... and don't forget the all-purpose Model 209

This thermostatic expansion

valve gives you precise control

under any conditions. Finger-

tip pressure-limit adjustment,

0-55 lbs. Prevents motor over-

load during peak operation.

Any superheat setting from 0 to 20°F. Functions perfectly

in any position - at any am

bient temperature. For Methyl,

F-12 and F-22,

"Here's your BEST B



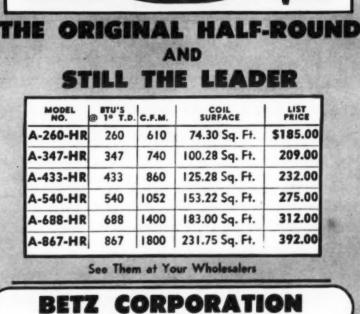
tested A-P Model 216. Accurately meters refrigerant to single or multiple coils . . . operates efficiently in any ambient temperature, in any position.

The job proved 216C comes in sweat or flangetype bodies . . . both with 1/4" flare external equalizer connections. "Equa-Flo" distributors, for multiple feed coils, can be furnished for both models. Adjustable superheat, with range sufficient for all applications. Capacity 31/2 to 11 tons, F12.

A-P (ONTROLS (ORPORATION

2460 N. 32nd Street, Milwaukee 45, Wisconsin ada: A-P Controls Corporation, Ltd., Cooksville, Ontario





INDIANA

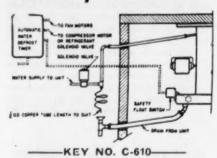
HAMMOND *

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What's New

When requesting further information on new products, please use "Information Center" form.

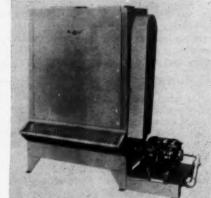
Recold Makes Stock Item Of Safety Float Switch



LOS ANGELES-In order to avoid overflow of the drain pan if the drain pipe becomes clogged, Refrigeration Engineering, Inc., has recently offered safety float switch for use with automatic defrosting of Recold water defrost coils. While this is not a new item, it has recently been made available as a regular stock unit.

The illustration shows a basic safety float switch hookup. The complete assembly includes a mercoid type float switch with junction box mounted on the back, bracket for attaching to the defrost fan, and the float ball.

Easy installation is a feature of the safety float switch, with the bracket clamping onto the defrost pan and simple wiring.



Low Priced Cooling Towers Come In 3 to 10-Ton Sizes

KEY NO. C-611-

ATLANTA - Larkin Coils, Inc. here has introduced a new, lowerpriced line of "Hydro-Miser" cooling towers. The new CT models are being produced in 3, 5, 71/2, and 10 nominal ton capacities

Lower prices for the cooling towers are made possible by a simplified new design and streamlined production methods, according to O. M. Sims, president.

The new Hydro-Misers use a wetted surface which is composed of a grid-work of screens. The screens

hold a maximum amount of water in suspension and expose a greater area of water surface to the air, it was stated.

Fans in the new cooling tower are double-inlet, forward-curved centrifugal wheel type which are dynamically balanced after hot-dip galvanizing. They are mounted on a heavyduty steel shaft which is supported self-aligning, pillow-block type bearings with graphited bronze bush-

The spray header is galvanized iron with centrifugal, non-clog bronze spray nozzles. Each of the nozzles is equipped with a removable orifice to facilitate cleaning and main-

Motors of the new units are standard NEMA, drip-proof type. The pumps are centrifugal type with a stainless steel shaft, bronze impeller, mechanical seal, and two ball bearings. A single motor of sufficient power to operate both pump and fans is provided with the CT Model Hydro Miser. Remote-type towers are also available.



Transparent Plastic Covers Protect Appliances

-KEY NO. C-612-

CANTON, Ohio-Special transparent polyethylene envelopes which can be placed over ranges, refrigerators, washers, and other major appliances in storage to protect them against dust and moisture have been announced by Canton Containers, Inc.

Sold under the trade-name "C-Line Covers," these envelopes are tailored of a special polyethylene sheeting which is tough, tear-resistant, moisture-proof and unaffected by extremes of temperature, salt air, or fumes often encountered in industrial

The envelopes the light in weight and easy to apply. Being transparent, they permit easy identification and inspection of the item covered.

C-Line Covers are made in styles to cover all types of white goods, and in various weights.



from Chill Chest sales is one big reason more and more dealers are joining the fast growing

Revco family.

Write For Distributor's Name REVCO, INC. · DEERFIELD, MICH.

Webber Shows Its First 17-Cu. Ft. Home Freezer



-KEY NO. C-613-

INDIANAPOLIS-The first selfcontained Webber home freezer, a 17-cu. ft. chest model, has been introduced this year by the Webber Appliance Co. here.

Robert C. Webber, who manufactures and sells his own freezers, has produced remote type freezers for several years. This is his first selfcontained job.

The ¼-hp. condensing unit is located at the right end of the freezer. A non-refrigerated storage compartment for freezing supplies and materials tops the condensing unit.

The interior of the stainless steel chest is divided into four equal size compartments. Access to them is through two lids, with two compartments beneath each lid.

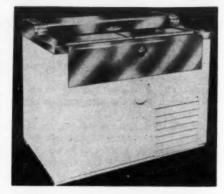
Exterior measurements of the box are 96 in. long, 33 in. high, and 281/4 in. deep. Interior freezing space measures 69 in. long, 22 in. high, and 19 in. deep.

Like Webber's remote models, the self-contained freezer features Webber's patented heat exchanger that is claimed to give rapid and deep chilling with low electrical cost.

A 2-in, baffle around the lid openings seals in the cold and prevents warm outside air from circulating into the cabinet. All sides of the freezer are protected with 51/2 in. of moisture and vapor proof insulation, which is claimed to protect food for as long as three days in the event of power failure.

There are no exposed coils. Insulation packed around the coils prevents frost from forming outside the freezing compartment.

Uniform 0° F. temperatures are maintained throughout the cabinet. No defrosting is required and the smooth interior makes for easy clean-



Self-Contained Beverage Coolers In 4, 6-Ft. Lengths

-KEY NO. C-614-

PHILADELPHIA-A new self-contained beverage cooler, available in 4 and 6-ft. lengths and measuring 29 in. deep and 37 in. high, has been announced by Fogel Refrigerator Co.

Known as models 4UC and 6UC, these beverage coolers feature all welded steel construction, heavydensity glass fiber insulation, hardbaked enamel exteriors, and stainless steel tops, doors, and front aprons.

Model 4UC has a capacity of 16 cases of 6-oz. bottles or 12 cases of 12-oz. bottles. Model 6UC has a capacity of 30 cases of 6-oz. bottles.

Cooling is provided by the "Fogel-Aire" dry refrigeration system incorporating a blower coil and powered by a 4-hp. hermetically-sealed condensing unit.



AIR CONDITIONING UNITS HAVE TO BE RELIABLE ... Every time you recommend an air conditioning unit, you lay your reputation on the line. The unit has to meet the requirements of the job in each and every case. With BAKERAIRE, constant, accurate output is assured by balanced functioning of all parts.

direction by simple adjustment of louvres.

Slow speed, full air capacity of the Fan Section balances with

The Coil Section, in which a 5 row coil has ample surface remove moisture and heat, balanced with

The quiet efficient Compressor Section where the controls are integrated for automatic operation and complete safety protec-For final protection the interlock relay prevents short

cycling of the compressor unit. These features cut installation and maintenance time costs: All water connections are run to an external utility panel, eliminating inconvenient internal connections All electrical connections are integrated in one panel in front of the unit

All functional parts are easily accessible through the removable panels For further information, just write to:

BAKERAIRE CORPORATION South Windham, Maine Offices in Principal Cities

Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in Air Conditioning & Refrigeration News use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

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AIR CONDITIONING & REFRIGERATION NEWS

Reader Service Dept. 450 W. FORT ST. **DETROIT 26, MICHIGAN**

What Was New

At the Restaurant Show



"FRIGIDESSERT" back

counter self-contained re-

frigerated display case

wins the attention of S.S.

Hockenberg (1.) of Hock-

enberg Fixture & Supply Co. of Des Moines. Julie Ferlauto, advertising and

sales manager of Stain-

less Food Equipment Co.,

points out that the case

provides 11 sq. ft. of re-

frigerated shelf space under fluorescent light in

4 ft. of counter space.

BASTIAN - BLESSING'S "Dish-o-lator," a complete dishwashing and garbage disposal system in one package for small restaurants, intrigues Mrs. H. Seaman of Seaman's Restaurant, Bellevue, Ohio. A. F. McMahon, service manager for Bastian-Blessing, explains that there is container for paper refuse, a garbage disand pre-rinsing sink built right into the unit.

TILLO -

to ear sills

CUBES AND THREE GRADES of crushed ice are what Georgia Ellis can dig out of this Carrier icemaker, model 26H5. The unit will produce 450 lbs. per day. Divided sections in the storage bin keep the two kinds of ice separate.

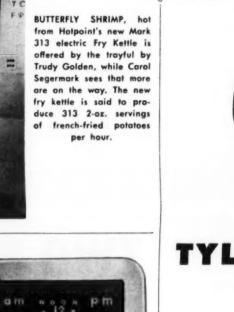
Pictures of products displayed at the National Restaurant Show in Chicago's Navy Pier appear on this and following pages. Additional pictures were published in the May 25 issue of the News.





IT'S EASY to push Monitor Process Corp.'s new bulk milk dispenser around, discovers Mrs. Marvin Clark of Owensboro, Ky. It's designed for hospitals, hotels, and catering services. The refrigeration unit is on the bottom shelf.







lower temperatures than ever before with this Paragon "de-frost-it"

RELIABLE automatic defrosting keeps bottles at lower temperatures than ever before with this Paragon "de-frost-it" Model TD-360.

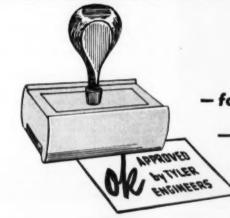
Specifically designed for beverage cooler applications, the Paragon "de-frost-it" Model TD-360 can be used with all makes, most models. Compact, easy to install, it can be mounted in compressor compartment. It's factory pre-set, but cycle is adjustable from 1 to 5½ hours. Up to ½ HP capacity.

For full details or the name of your jobber, write:

PARAGON ELECTRIC COMPANY

1687 TWELFTH STREET . TWO RIVERS, WISCONSIN

They must be good. 96% of the manufacturers of commercial refrigeration equipment using automatic defresting specify Paragon defrosters as standard equipment. €1953



- for maximum refrigeration efficiency!

— for low cost of operation!

- for dependable service!

TYLER Balanced Systems



Tyler is now furnishing Tyler Condensing Units, developed for use with Tyler commercial food refrigerators and refrigerated display cases—to give you truly BALANCED refrigeration SYSTEMS.

This balancing of the low side (cases) and the high side (condensing units) of the refrigeration circuit means that you

get the right system for the job. You get dependable refrigeration for your customers—at lowest possible cost.

With Tyler Balanced Systems you can now depend on Tyler for the complete refrigeration set-up—with the entire Tyler organization ready to back up the installation.

TYLER FIXTURE CORPORATION, NILES, MICHIGAN

Tyler Fixture Corp., Dept. R-6 Niles, Michigan
Send information on new Tyler Condensing Units
Copen Display Cases Service Cases Refrigerators Coolers Storage Freezers.

NAME______ADDRESS______

TYLER

the most complete line of food store equipment.



Solvent Degreaser Has High Safety Factor, Fast Action For Production Line Use

INDIANAPOLIS - A solvent degreaser which combines several features to make an adaptable solvent for production line use has been introduced by Brulin & Co. located

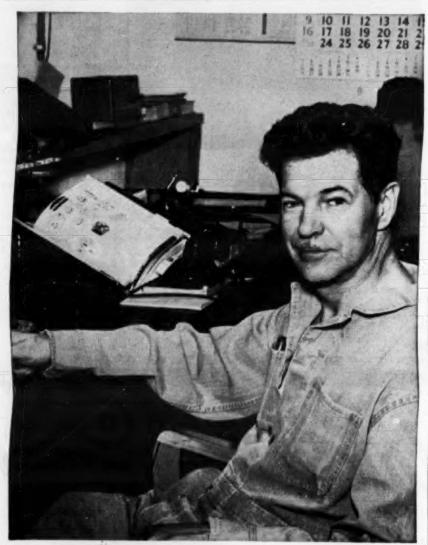
Practically non-toxic and noninflammable, it is said to be safe to use without requiring special safety clothing or special ventilating equipment.

Health hazards are eliminated while the efficiency of prime solvents is retained.

Because Brulin solvent degreaser acts and dries quickly, it is especially useful where speed is essential.

The product is said to be particularly efficient for use in cleaning electrical motors because it has no adverse effects upon materials used for electrical insulation.

The degreaser does not contain carbon tetrachloride or other toxic chlorinated solvents. It is a highly concentrated solvent for all degreasing and cleaning operations and is available in drums containing from 5 to 55 gals., according to the manufacturer.



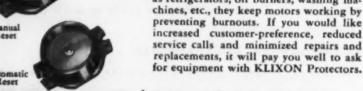
Motor Repair Shop Owner **Finds KLIXON Protectors Insure Against Burnouts**

SO. HARWICH, MASS.: Mr. Alfred LaMontagne, owner of the Cape Cod Electric Motor Service knows what he's talking about when he praises KLIXON Protectors. More than 200 motors pass through his shop every month.

"In my ten years of experience with electric motors, I've found that KLIXON Protectors save our customers unnecessary repairs. They're tamper-proof . . . and the lowest cost insurance against motor burnouts that you can get."

KLIXON Protectors Build Customer Goodwill by Preventing Major Repair Costs

The KLIXON Protectors illustrated are built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like



SPENCER THERMOSTAT Division of Metals & Controls Corp. 2406 FOREST ST., ATTLEBORO, MASS.

But It's Noncompulsory!

Refrigeration Covered In Proposed Code For Multiple Dwelling In New York State

NEW YORK CITY-Some provisions governing refrigeration, air conditioning, and mechanical ventilation are included in the State of New York's proposed new building construction code applying to multiple dwelling.

The code is not mandatory, but it can be adopted by municipalities if they so desire. More than 60 communities in the state have already adopted the state construction code applying to one and two-family dwellings, which went into effect on Nov. 1, 1951, according to the State Building Code Commission.

The proposed multiple dwelling code should not be confused with the state's mandatory Multiple Residence Law. The latter, which has been in effect for some time, is designed primarily to spell out fire protection requirements for hotels.

New multiple dwellings will in most instances be the only ones affected when the proposed new code is issued and adopted. In municipalities where the code is adopted, an existing structure will be governed by the proposed code if:

(1) It becomes a multiple dwelling after not being so occupied previously;

(2) It is moved into, or within, municipal limits subject to the code for occupation as a multiple dwelling; (3) An existing multiple dwelling

is altered or repaired and such costs within a 12-month period exceed 50% of the replacement cost of the building.

Any addition or alteration to an existing multiple dwelling, however, must conform to regulations of the

Location of refrigeration equipment is the first provision in the section of the proposed code devoted to that subject. It reads:

"Refrigerating equipment shall not be permitted in exits, except that self-contained refrigerating units shall be permitted in lobbies provided there is no restriction of exits, the refrigerants are non-irritant, non-anesthe tic, and non-flammable in nature, and the quantity of refrigerant contained in any such unit is limited so as not to constitute a potential hazard."

Other provisions of the proposed code affecting refrigeration are as follows:

Text of Proposed N. Y. Code

B 507-1.2 Materials

Refrigerating equipment shall be of materials resistant to the corrosive effects of refrigerant conveyed by them so as to remain gastight and safe. All parts of such equipment shall be designed, constructed, and installed so as not to exceed the allowable working stresses of the constructed, and installed so as not to ex-ceed the allowable working stresses of the materials used.

B 507-1.3 Refrigerants

a-Refrigerants that are flammable in nature shall not be used in multiple

b-Refrigerants that are irritating or anesthetic in nature shall be limited in quantity so as not to constitute a potential hazard.

c-In the cooling of air, the use of refrigerants that are irritating or anesthe-tic in nature shall be limited to systems in which chilled water or brine is used as a cooling medium.

B 507-1.4 Refrigerant Piping

Refrigerant piping shall not be located in ducts, chutes, exits, stairways, hoist-ways, or shafts, or where it may be damaged by mechanical injury.

B 507-1.5 Machinery Boom

a-No apparatus to produce an open flame shall be installed in any refrigeration machinery room unless such flame is provided with a suitable hood connected to an exhaust system that is capable of ef-fectively removing the products of combustion to the outer air.

b-Refrigeration machinery rooms shall be used for no purpose other than for mechanical equipment.

c-Refrigeration machinery rooms shall be of construction that is safe for the type and quantity of refrigerant used. Such rooms shall be ventilated in con-



formity with the requirements set forth in section B 506-5.

Refrigerating equipment shall be provided with means to relieve safely excessive pressures.

B 507-1.7 Plumbing Connections

a-Refrigerating systems using water from a public water supply for cooling purposes shall be provided with devices which will operate automatically to

prevent excessive water consumption.
b—Drainage of refrigerating equipment shall be in conformity with the requirements set forth in section B 502-5.

B 507-2 Cooling Towers

a—Cooling towers in exposed locations shall be constructed of noncombustible materials, including the exterior finish, with the exception that the drip bars may

b-Cooling towers shall be designed, installed, and located so that when in operation, noise, fog. or water spray will not cause a nuisance.

c—Outdoor cooling towers located on multiple dwellings shall permit access for fire fighting and shall not constitute a fire

The State Building Code commission is also preparing a "code manual" which will illustrate materials and methods of construction that will comply with the code but won't "exclude other constructions which meet the requirements of the

The commission also points out that "the provisions of the proposed code, in so far as practicable, are composed in terms of performance objectives, making adequate performance the test of acceptability of materials and techniques rather than rigidly specifying methods of compliance.

Trimble To Represent New Hajoca Pittsburgh Office

PHILADELPHIA - Hajoca Corp., distributor of plumbing and heating, industrial, and refrigeration supplies recently announced the appointment of John P. Trimble as representative of its Pittsburgh sales office.

Previous to joining Hajoca, Trimble was with Rockwell Mfg. Co., Nordstrom Valve Div.

TENNEY ALTITUDE CONVERSION TABLE

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PRESSURE TEMPERATURE AND CONVERSION CHART ORANGE FIGURES = VACUUM BLACK FIGURES = PRESSURE MATE F13 F22 912

-151.1 145.6 **Tenney Offering Plastic**

Pocket Conversion Tables

NEWARK, N. J.-Tenney Engineering, Inc. here offers designers and refrigeration engineers and servicemen a handy 2 in. by 6 in. plastic pocket-card imprinted with frequently-used altitude and refrigera-

tion conversion tables. Of particular value to the designer of equipment to be used under high artitude conditions, the company said. is the table converting altitude to pressure in inches of mercury (abs), pounds per square inch (abs), and millimeters of mercury (abs). This side of the card also includes a 6 in. straight edge, market off in increments of one-sixteenth of an inch.

The other side gives pressures (psig) of "Freon 13," "22," "12," and "14" over a wide range of temperatures, both Fahrenheit and centigrade.

One application of this table is by servicemen in identifying the type of Freon in a system, knowing the pressure and temperature, according to Tenney. Also included on this side of the card are the algebraic equations for converting centigrade to Fahrenheit and Fahrenheit to centigrade.

The altitude conversion table runs from zero to 95,000 ft. in increments of 5,000 ft., and from 100,000 to 260,000 ft. in increments of 10,000 ft. The pressure - temperature table ranges from -250 to 110°F in increments of 10° F.

The conversion card is available without charge.

BIG REASONS



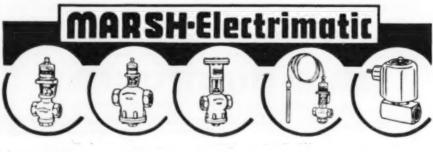
Boot eliminates packing — friction

At one time the best way to eliminate packing was with a metal bellows, but this Neoprene boot has all the advantages of a bellows plus ten times its life. We have repeatedly proved this, too . . . by cycling the boot, without failure, under actual operating conditions ten

times as long as we could cycle the best metal bellows.

These are just two of the many features that make the Marsh-Electrimatic last longer and function better. They are typical of plus values found in the entire Marsh-Electrimatic line. Write us or see your wholesaler.

THE ELECTRIMATIC CO. Sales affiliate of Jas. P. Marsh Corp., Dept. D, Skokie, III.





One of the 14 Unitaire conditioners can be seen at left center of this section of the drafting room at the Electronics Div. of Westinghouse in Baltimore. By spacing these units around the outer periphery of the room, duct work was kept to a minimum.

Cooling Temporary Quarters

Self-Contained Units Solve Typical Postwar Problem In Westinghouse Electronics Plant

By T. E. Tyler, Manufacturing Staff Assistant, Electronics Div., Westinghouse Electric Corp., Baltimore.

Would you pay \$2 a square foot for an air conditioning system? Especially for a system that can be picked up and moved as easily as desks and file cases? If you would, investigate the adaptability and portability of the completely self-contained air conditioning unit.

Such a unit helped Westinghouse solve the familiar postwar problem: how to expand production facilities and office space at the same plant site without adding a building.

The solution-taken in two stepsproved relatively simple. The first step was to convert to office space for the engineering department, a single - story, flat - roofed, wooden structure originally built for the assembly of military radar equipment.

The building-208 ft. long by 128 ft. wide with a 24-ft. high ceilingwas completely renovated: An asphalt tile floor was installed, partitions erected, private offices provided, ceiling and walls painted, and a new, high-intensity lighting system in-

MAY TEMPERATURES WERE 20° HIGHER THAN OUTSIDE

Before the end of the first summer in the building it became evident that step number two would have to be taken (during the first 12 days of May tests proved it was 20° hotter inside than outside) that an air conditioning system would have to be installed if the efficiency of the engineering department was to be maintained and the damage to engineer-

During the fall and winter of 1951-

78° F. The 395 engineers and draftsmen who regularly work in this building now find it just as easy to maintain output in the summer as in the winter. There is no more of this 3 o'clock "man - am - I - hot!"

ONE-THIRD OF WASTE WATER COOLS ROOF

City water is used to cool the condensers and this requires 127 g.p.m. An electrical time clock that cycles the flow is connected with a valve in the waste water line.

One-third of the waste water is used for cooling the roof, there being sufficient pressure after the water leaves the condensers to force the water up to the roof. The cooling system on the roof consists of a series of serrated spray nozzles spaced to wet the roof down uniformly.

There is very little maintenance required to keep the 14 Unitaire conditioners in operation. There are a total of 56 filters which should be changed every sixth week. The maintenance department has estimated that the cost, based on seven changes a year, will amount to \$500.

Sales and Service Staff

EVANSVILLE, Ind .- The air conditioning sales and service staff of Servel. Inc. has been augmented recently by the addition of four new representatives, it has been announced by H. R. Nielsen, sales manager of the air conditioning division.

staff of the midwestern region. He is a Servel air conditioning service representative. He has had 15 years' experience in the air conditioning sales, engineering, and service field with manufacturers of large air condition-

Glen Galloway is now on the staff of the direct sale department. His headquarters are in Evansville. He has been with Servel for many years in the engineering department. Prior to his new assignment he worked for the patent division in Washington,

Norton Miller has joined the eastern region staff as an air conditioning sales representative. Formerly he was with the Bush Mfg. Co., manufacturer of refrigeration, air condi-

J. L. (Joe) Kaposta is preparing and executing service training programs for the factory and the field for the service department. He recently returned from the service in

Separate Systems To Cool

CHARLESTON, S. C .- Each floor of a two-story office building to be erected at 100 Broad St. for occupancy by Carolina Mutual Fire Insurance Co. will have a separate air conditioning system, according to Lubs, secre tary trea of the firm. Cost of the new building

Servel Adds 4 To Cooling

R. P. (Ray) Schenk is new on the ing equipment.

tioning, and heating equipment.

Charleston Office Building

will approximate \$75,000.

aire conditioners in the most effective locations throughout the large room are the two things that contributed most to this economical air conditioning system. These 14 unit air conditioners maintain an 80° F. dry bulb temperawith 50% humidity who outside dry bulb temperature is 95° was to be eliminated. F. and the wet bulb temperature is

52, Lloyd E. Mitchell, Inc., of Baltimore designed and installed the sys-

tem of summer air conditioning for

this building. The system consists of

eight 8-ton and six 5-ton Westing-

house Unitaire self-contained air con-

LONG RUNS OF DUCTWORK

NOT NECESSARY

along the two long outer walls. The

absence of ceiling high partitions, ex-

cept for six small private offices,

made possible this arrangement; and

in turn, this arrangement made long

be seen in the illustration. A short

rectangular elbow connects the Unit-

aire conditioner to a 4-ft. long, 48-in.

by 14-in. rectangular horizontal sec-

tion of duct that terminates in an

The top of all horizontal ducts is

The only ductwork of any extent

kept 6 in. below the bottom of the

is that used for the small private

offices. About 40 ft. of 10 in. by 10 in.

and 20 ft. of 10 in. by 8-in. duct is

and the freedom to place the Unit-

This minimum amount of ductwork

A typical piece of ductwork can

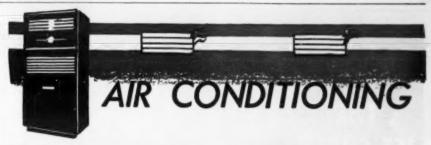
runs of ductwork unnecessary.

air distributing louver.

required.

fluorescent lighting fixtures.

These units are placed strategically



Hotel Plans Conditioning To Help Restore Prestige

AUGUSTA, Ga.—Installation of air conditioning equipment in the Bon Air hotel here is assured, according to George Robinson, president of Paragon Equites, Inc. of New York City, and Earle Honig, vice president of the company, which now controls the local hostelry.

Robinson and Honig were here recently to conclude arrangements for air conditioning of the hotel. Robinson indicated that this is one of the improvements planned to restore the Bon Air "to its former position of prestige among hotels of the country."

Tampa Firm Wins Contract To Cool Courthouse Bldgs.

BARTOW, Fla.-A contract for air conditioning of Courthouse Annexes No. 1 and 2 was awarded recently by the Polk County Commission to Tampa Armature Works, Inc. whose offer was lowest of seven bids re-

The Tampa firm quoted a price of \$17,240 for air conditioning annex No. and \$7,887 on No. 2, or a price of \$24,877—\$250 less than the individua! totals for both jobs. The combination offer was accepted.

Air Cooled Crow's Nest

Office 18 Ft. Above Bakery Floor Becomes Hot Box

PITTSBURGH - Ertl Baking Co. has done the unusual here in its new plant on River Ave. by tucking away a private office about 18 ft. above the main floor plant area.

Temperature around this office at ceiling height reaches as high as 110° F. in summer from the heat rising from the baking ovens below. Office was made comfortable by

installation of a floor mounted Kramer Unicorn air-cooled air handling unit, with a 1-hp. Worthington remote unit installed on the roof.

The office was placed at this location so A. Riley Lumpkin, vice president and general manager of the company-who designed the office, might view baking operations through windows on three sides, and supervise by telephone, preventing production bottlenecks.

To Cool New Dallas Hotel

DALLAS - To be air conditioned throughout, a new 37-room suburban hotel facility, Parkway Hotel, Inc., is under construction at North Central Expressway and Lee St.



Packaging makes many products more efficient, more convenient and more acceptable these days. And large size packaged air conditioners (up to 60 tons) are no exception!

That's why so many Governair Completely Packaged Air Conditioners are in use today. They are engineered and built by the pioneers of large size packaged air conditioning - Governair!

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your products or applications, you secure the added advantage of simplifying your design and service problems because of the similarity in their basic design.

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USED ICE PLANT EQUIPMENT

- 2—Ammonia Compressors, Frick, Double Action, 10½" x 18" J. T., 140 Ton capacity, 22 lbs. PSI Suction, 185 Lbs. PSI Discharge; directly connected to GE 225 HP, 2300 volt, 2 phase, 180 RPM, 60 cycle motor; with control panel and Motor Generator Set.
- 2—Water Coolers, Vilter; Shell & Tube 12-Pass, 24" Dia. x 12'-0" Long, 156—11/4" Tubes, 612 S. F. of surface; with 12" x 10'-8" Suction Accumulator, Ammonia Float, stop & drain valves; with pipe "S" Type Stand for Vertical Mounting.
- 5—Packice Machines, Vilter, 6-Section, Spray Type, with Horizontal Accumulators, Complete with connections & Piping; Louis-Allis 5 HP Motor; with Briquette Press for #1-16 Briquettes.

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THE MASTER SERVICE MANUALS — — —
BUSINESS NEWS PUBLISHING CO., DETROIT

Refrigeration Problems and their solution

by Paul Reed

For Service and Installation Engineers



Paul Ree

Mental Filing System

A man who had a reputation for being well informed in his field of work, upon being asked how he had managed to accumulate his know-ledge, answered: "Well, as a young fellow, when I was working at the bench and lugging a tool-kit, I thought a lot about how I could get ahead. I was doing pretty well working with my hands; but like most of us, I wanted to make more money. Besides I've always been a little lazy, and I figured maybe I could make a living a lot easier. That didn't quite work out though; I seem to be working harder than I did then, although in a different way, but enjoying it more.

MIND SEEMED LIKE A ROLL-TOP DESK

"I realized that I wasn't too smart, and probably couldn't compete with some of the real bright boys. There seemed to be just about so much I could remember at one time. My mind seemed to be like one of these old roll-top desks. There were just so many pigeon-holes in my brain, and I seemed to have all of those pigeon-holes filled with bits of miscellaneous information that didn't seem to tie together when I needed to work out a problem.

"I had to hunt through a lot of formulas, rules-of-thumb, short-cuts, tables, and such like stuff that I had picked up here and there. There didn't seem to be any order in all this information. It was just stuffed into any pigeon-hole that was handy

at the time I learned It. I couldn't seem to make heads or tails of it. I always had trouble finding a formula when I needed it, and even when I did find it, I was never sure it was the right one to use.

"So I decided that since my little brain just had so many pigeon-holes that would hold just about so much, I ought to put in the pigeon-holes I had only the main things, and leave the rest to books, tables, and other records, where I could look them up if I needed them. Being lazy, it sounded easier that way too.

"But what I did put in the pigeonholes, I wanted to be able to put my finger on right away if I needed it. I never did have a very good memory, so I couldn't depend on remembering just what pigeon-hole the information was in.

SOME KIND OF MENTAL FILING SYSTEM NEEDED

"I saw that I needed some kind of mental filing system. It had to be simple too, for I figured I wasn't smart enough to handle a very complicated system. And that had me stumped. I was mighty lucky. I happened to meet a fellow that put me on the right track. Didn't take him long to do it either—less than an hour. He probably forgot all about me in another hour, but I have never forgotten him and what he told me.

"This fellow showed me what was wrong. One thing was about what I had been suspecting—I'd been trying to remember too many things, a lot of them relatively unimportant. He showed me what was unimportant and what wasn't. He showed me how to choose between what was important and must be remembered, and what was relatively unimportant—details that don't need to be remembered.

"Take formulas for instance; I'd been cluttering up my mind with them. He showed me that like tables, they can be found in hand books—no need to try to remember most of them, just a few of the basic ones.

NATURE'S LAWS ARE MAIN THING

"He told me that Nature's Laws are the main things. They provide the skeleton of basic fundamental principles. On this framework are hung each of the formulas, tables and other details, each in it's proper and logical place.

"If you understand and remember Nature's fundamental laws, there is no hunting, for they are in order. You just follow the framework, sort of like a tree, until you just naturally wind up at the right place and with the right answer.

"You don't have to remember that X equals Y plus Z or something. The main thing is to understand the 'why.' Then you build your own formulas as

you need them.

"That made sense; so I started to study these basic fundamental principles. It was real rough going for awhile. A lot of hours, night after night. Not just a few nights either. It was weeks before I began to get a glimpse of the whole plan.

"But before long I began to get a general picture of the trunk and main branches. Each smaller branch of information began to have greater meaning. Finally when I'd get out to a detail like a formula, I'd know how I got there and what that formula meant. If I ever needed it I knew where to find it.

STUDYING BEATS MURDER MYSTERIES

"And the more I studied, and still study, the more interesting and absorbing it has become. Beats murder mysteries all hollow.

"It gave an entirely different view point too. Before, everything was just a scramble of miscellaneous facts. Now, they appear to be held together under one great master plan. We don't know all the answers, but we do have a pretty good picture of the general structure and foundations.

"That framework—'theory' some folks call it—is my mental filling system. Now when I have a problem, I just follow along Nature's plan, or 'laws' we call them, like a hound dog following a rabbit trail, and if we don't allow ourselves to go off onto

some side track, we arrive right where we wanted to go.

"Saves a lot of work too. It's a lot easier than floundering around kneedeep in a mess of rules-of-thumb formulas, tables, and such details, trying to sort them out and decide which one to use, and maybe wind up using the wrong one, just because we didn't know 'why.'

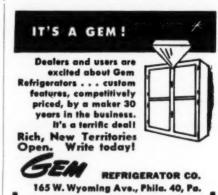
"I read someplace that an education consists in knowing where to find the right information when you need it, and then how to use it. No use trying to compete with handbooks. They can remember a lot more than you can. Let them handle the details. You keep the pigeon-holes of your mind free of all but the main plans; the rest will take care of themselves."

Maybe this man's experience will help you; it did him.

New England T & T Plans To Air Condition 2 Offices

SPRINGFIELD, Mass.—New England Telephone & Telegraph Co. plans to spend \$50,000 to air condition its offices at 295 Worthington St. and 85 Chestnut St.

A permit issued by Building Commissioner Gordon Robertson indicated that the Worthington office project will cost \$30,000 and the Chestnut St. job \$20,000.







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WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

What Was New

At the Restaurant Show



LERN, Inc.'s self contained refrigerated display case with Thermopane glass front and sliding glass doors in rear is the topic of conversation between Milton M. Graupe, Lern president (I.) and Theodor M. Danziger of Greene Equipment & Refrigeration of Chapel Hill, N. C. The case is designed for either counter or window display.



"PEBBLE" ice maker introduced by Ajax is available in three capacities: 200, 400, or 800 lbs. a day, Therese O'Neill of St. Paul is informed by A. S. Hancock. New machine produces an ice similar to crushed ice which is claimed to be "dry and non-mushy.



REFRIGERATED sandwich unit added by Foremost Fountains lines up exactly with other fountain equipment of this manufacturer, a development of mutual interest to H. W. Walker, San Antonio representative, Jos. E. Russell, Foremost vice president, Ken McGaw, Philadelphia representative, and Andrew Alimossy, company treasurer.

SEAL OF APPROVAL from the National Sanitation Foundation is proudly displayed on Stanley Knight Corp. soda fountain. Walter Schneider, (r.) manufacturers' agent in Pittsburgh for Stanley Knight, explains it to Mr. & Mrs. Al Stevens, Flint, Mich. restaurant operators.



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num Anodizing.



ARM OPERATED VALVE on this new Silver King bulk milk dispenser enables A. Mendelson of Stevens-Lee Co., the manufacturer, to pour milk into a paper cup, something, he says, which cannot be done on dispensers where the cup itself must be pushed against



ice maker model 450B absorb J. G. Vaughn and A. G. Erickson of the Bodine Electric Co., Chicago. The urit will produce up to 8,000 cubes or 450 lbs. of crushed ice per day. It is shown here mounted on a crusher and



standard bin.



CLEARNESS of "Crystal Tips" ice as produced by the ice maker shown by American Automatic Ice Machine Co., is one of Dick Coon's selling points in talking with Helen Robinson of Williams Bay, Wis.



"Triple feature" OASIS is the easiest water cooler to sell!

Why do Oasis dealers agree that Oasis Water Coolers are the easiest to sell? Just look at these sales advantages that Oasis gives dealers, and you'll see why!

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- Sales literature and helps for you and your salesmen!

Write for complete data on the Oasis line, and the money-making Oasis Dealer Plan. And ask about the sensational Oasis Air Drier!



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THE EBCO MANUFACTURING CO., 409 WEST TOWN ST., COLUMBUS 8, OHIO



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What Was New

At the Restaurant Show



ABOVE: VERSATILE design of Leitner's improved "Visicold" merchandising case permits three refrigeration arrangements: base only cooled, base and lower display section cooled, or entire case cooled, Mr. and Mrs. O. W. Bedell, Tonowanda, N. Y. restaurant operators, are told by Sam Kase of Leitner.

SALES ACTION!

position.

industry — will be there.



ABOVE: HANDFUL of cylindrical "kubes" without holes are shown by A. T. Ascolese of Crusader Refrigeration, Bound Brook, N. J., as Sol Sumberg, eastern representative for La Crosse Cooler Co. reaches into La Crosse's new "Kube King" ice maker for more. E. C. Redmond, La Crosse midwest representative, looks on. Beyond him is the company's new "Polar Pantry" home freezer.



HERRICK'S 30-cu. ft. commercial freezer with five sharp freezer surfaces catches the eyes of Fred Hagan of Anheuser Busch in Chicago and Rose Honiak, also of Chicago. The freezer is available with stainless steel exterior and either stainless steel or white enamel liner or with white enamel on both exterior and interior.

PATENTS

Week of December 23 (Continued)

2,622,410. PREEZING TRAY. Edward H. Roberts, Erie, Pa., assignor to General Electric Co., a corporation of New York. Application Oct. 17, 1949, Serial No. 121,-659. 11 Claims. (Cl. 62—108.5.)



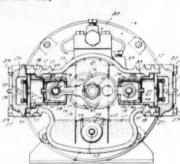
1. A grid for a freezing tray comprising a longitudinal divider, a plurality of transverse dividers, said longitudinal divider including top, center and bottom superimposed sections each extending lengthwise of the tray, each of said transverse dividers having a single vertical slot therein for receiving said top, center and bottom sections of said longitudinal divider, each of said slots having a recess extending from one side thereof adjacent said center longitudinal section, each of said recesses including an inclined surface directly laterally adjacent said center longitudinal section whereby said center longitudinal section may be inclined from the plane of said top and said bottom sections to project into said recess for permitting movement of said center longitudinal section into assembled position, and a handle engaging said top and said center longitudinal sections for effecting relative movement of said top and said center sections to release ice blocks, said handle including a portion extending adjacent both sides of said bottom section and maintaining said center longitudinal section in the plane of said top and said bottom longitudinal sections to prevent accidental disassembly of said grid.

2,622,754. REFRIGERATOR CABINET CONSTRUCTION. Horace W. Eagles, Erie, Pa., assignor to General Electric Co., a corporation of New York. Application April 23, 1948, Serial No. 22,869. 13 Claims. (Cl. 220—9.)



2. A refrigerated cabinet comprising an outer wall, an inner wall spaced from said outer wall, a breaker strip closing the space between said walls, a moisture-impervious, flexible diaphragm, a retaining strip maintaining one edge of said diaphragm in engagement with said outer wall, a second retaining strip maintaining another edge of said diaphragm in engagement with said inner wall, said diaphragm being spaced from said breaker strip and extending into the space between said walls, a heat-insulating material filling the space between said walls, and a resilient compressed heat-insulating material filling the space between said breaker strip and said diaphragm and exerting pressure on said diaphragm and

2,622,788. REFRIGERATION COMPRESSOR. Axel Ramclow, Chicago, Ill., assignor to Mills Industries, Inc., Chicago, Ill., a corporation of Illinois. Application Jan. 19, 1946, Serial No. 642,348. 8 Claims. (Cl. 230—58.)



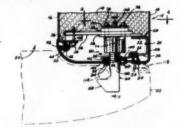
1. A refrigeration compressor comprising a crankcase having a cylinder block formed therein, the latter having an internal annular shoulder formed therein, a separate cylinder sleeve positioned entirely within said cylinder block and extending into the crankcase, said sleeve having an external annular flange engaging said shoulder, a valve plate of greater diameter than said flange engaging said flange and having its periphery in contact with the interior of the cylinder block, a cylinder head contacting said plate, cylinder head screws holding said parts in assembled relation against said shoulder under compression, a piston reciprocably mounted in said cylinder sleeve, and means for actuating said position.

2,622,851. BARREL SUPPORTING AND COOLING DEVICE. Charles G. Minor, Evanston, Ill., assignor of one-half to Charles F. Welsh, Highland Park, Mich.; Harry H. Gmeiner executor of Charles G. Minor, deceased. Application March 17, 1949, Serial No. 31,982. 4 Claims. (Cl. 257—14.)



3. An apparatus for receiving, holding and refrigerating a keg for beer or the like so that the keg is held on a vertical axis and so that the contents thereof may be dispensed comprising, a receptacle having a bottom wall and side walls, the receptacle being open at its end opposite the bottom wall, said receptacle having a depth less than the axial dimension of a keg so as to receive one end of a keg with a portion of the keg projecting therefrom, an internal facing element of rubber material on the receptacle substantially at its open end for engaging the keg so that the keg is stabilized and the receptacle closed thereby, refrigerant conducting means extending along the inner wall of the receptacle, said conducting means being flexible and adapted to engage the received end of the keg, means pivotally mounting the receptacle off center relative to a center line through and normal to the bottom wall so that the receptacle is normally in an upwardly opening position to hold a keg as stated, said receptacle being pivotal to a substantially horizontally opening position for receiving a keg, and spring means normally holding the receptacle in upwardly opening position and resisting its pivotal movement to horizontally opening position.

2,622,911. REFRIGERATOR CABINET LATCH STRIKE. Lamar S. Cooper, Cedar Rapids, Iowa, assignor to Amana Refrigeration, Inc., Amana, Iowa, a corporation of Iowa. Application Oct. 28, 1950, Serial No. 192,767. 6 Claims. (Cl. 292—341.18.)



1. In a device of the character disclosed for mounting in a wall structure and adapted for cooperation with a door having a latch, the combination comprising, a plate mounted in said wall, said plate having an opening therethrough, an interiorly threaded tubular member on one side of said plate, a locking washer having a threaded opening on the opposite side of said plate, a tubular strike element threaded in said tubular member and extending out of the wall for cooperation with said latch, said strike element on rotation thereof being adjustable inwardly and outwardly of the wall, and a locking screw extending through said strike element, through the opening in said locking screw extending through said strike element, through the opening in said strike element and locking washer, said locking screw reacting between said strike element and locking washer for locking said tubular member and locking washer in engagement with said plate and locking said strike element against rotation in said tubular member, said washer and said tubular member both being displaceable over the surface of said plate except when engaged with said plate by said locking action of said locking screw.

(To Be Continued)

Turn to "What's New" Page for useful information on new products.

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FEATURES of the John Wood Co.'s "Sani-Serve" bulk milk dispenser are outlined for J. C. Frehner (center) of Bowman Dairy. Chicago, by Robert Christiansen (left) and J. A. Zimmer.

UNDER - COUNTER refrigerator of welded aluminum is designed specifically by Foster Refrigerator Corp. to accommodate five Hotpoint electric cooking units on top, W. J. Whalen of Foster explains to George D. Anthony and John Hughes, Lima, Ohio, restaurant operators.

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D





MAX SACHS, president of Mallow Products, Inc., (in striped tie) demonstrates his "Tru-Cold" portable, self-contained refrigerated counter display case for desserts and salads to Phil M. Spero, Syracuse, N. Y. food service equipment distributor. The case has two adjustable shelves and provides 1,452 sq. in. of display space.

HOW TO APPLY VALVES

By A-P Controls Corp., Milwaukee

This is the third in a series of articles discussing functions and applications of various types of control valves used in refrigeration and air conditioning systems.

The series consists of excerpts from the "Product Application Manual" prepared by the sales department of A-P Controls Corp. and is published with permission.

Automotive Expansion Valves (3)

TYPES OF VALVES

A-P Centrols automatic expansion valves are classed in two general types: (1) the standard type valve and (2) the bleed type or by-pass type valve. Standard type automatic expansion valves are A-P Controls Model 204C Valves in 1/2 ton nominal capacity with "Freon-12," and the Model 304 Valve in 1 ton capacity with "Freon-12."

Bleed type or by-pass type valves feature a small slot in the valve orifice to prevent complete valve close off at the end of the running phase of the refrigeration cycle. This allows refrigerant to continue to flow to the low side (after the equipment stops operating) to accomplish a balancing of system pressures between high and low side during the off phase of the

RESULTS IN LOW STARTING LOAD

At the start of the next running phase, the pressure balance between high and low side results in a very low starting load, and condensing unit motors of various low starting torque types can be employed.

Many fractional horse power condensing units today are of the sealed type, and split phase or other low starting torque motors are often employed. With this type of equipment it is still possible to employ automatic expansion valves, as bleed type

valves have been specifically adapted for this type of equipment.

VALVE RATINGS

A-P Controls automatic expansion valves are rated according to regular ASRE rating standards. For complete capacity data, refer to rating charts or to the data bulletins listed.

MODEL 204C CAPACITY

A-P Model 204C valves are rated in the data bulletin at approximately 1/2-ton capacity (for "Freon-12"). This rating is made in accordance with standard ASRE methods of testing and rating expansion valves. Automatic expansion valve capacities according to ASRE standards are based upon a 3-lb. differential between opening and operating point of the valve.

However, due to the nature of auto-

matic expansion valve operation, the valve may be employed on any capacity machine up to the maximum differential of the valve. The valve will function well on fractional tonnage applications from approximately 1/4 ton up as valve capacity always adjusts automatically to capacity of the machine on which it is used.

FACTORS AFFECTING VALVE CAPACITY

A number of factors affect automatic expansion valve capacity. Chief among these is the actual pumping capacity of the compressor with which the expansion device is employed.

Inasmuch as automatic expansion valves are designed to meter the flow of refrigerant to an evaporator in direct proportion to machine pumping capacity, it is obvious that up to a certain point the greater the pumping capacity of the compressor, the greater the amount of refrigerant the valve will meter to the system's low side.

The maximum degree of opening of which the valve is capable (valve differential) is, of course, determined by the maximum limit of valve stroke. Up to this point, however, expansion valve capacity will match condensing unit capacity by providing the exact refrigerant flow required.

(To Be Continued)

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POSITIONS WANTED

EXECUTIVE ENGINEER-with 19 years of diversified experience in management manufacturing and engineering in the Major Home Appliance industry. Desires position as Works Manager or Chief En-gineer. BOX 4310, Air Conditioning & Refrigeration News.

TECHNICAL REPRESENTATIVE. Established, heavy engineering background, me-chanical, electro-mechanical, air condi-tioning. Metropolitan New York, BOX 4317, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

WANTED—SERVICEMAN. Low tempera-ture experience preferred, must be willing to travel. Please submit resume stating background, experience, and wages ex-pected. BOWSER TECHNICAL REFRIG-ERATION, Terryville, Conn.

MIDWESTERN REFRIGERATION and air conditioning manufacturer needs an experienced service manager. Must be able to organize service department and handle customer complaints. Must be familiar with air conditioning and refrigeration installations and equipment. Age range 35-45. Salary open. Address replies, giving full details of work history to BOX 4269, Air Conditioning & Refrigeration News.

EXPERIENCED REFRIGERATION engineers. A progressive Midwestern manufac-turer, well established, has openings for graduate Refrigeration Engineers experi-enced and well qualified in portable air conditioning units, development and test. Also a metal shop head who can handle men and produce samples of all types of refrigeration appliances. Submit a resume of your education, experiences and com-plete background. State your salary re-quirements. Interviews will be arranged. BOX 4300, Air Conditioning & Refrigera-tion News

EQUIPMENT WANTED

WE ARE in the market for 1500 old 145 lb. Freon Cylinders with valve & cap intact, Convert useless inventory to cash. Write EVERGREEN INDUSTRIES, 630 Colonial Ave., Pelham Manor, N. Y.

EQUIPMENT FOR SALE

FOR SALE 1950 Ford panel truck with shelving suitable for air conditioning or refrigeration service. This truck has been kept in top condition with regular oil changes, grease tabs, and new brake lin-ing. It has snow tires on rear wheels. If interested, call DUnkirk 2-0534, Lincoln Park, Michigan, any evening after six.

400 NEW vibration eliminators % tube size, packed bulk. A. R. A. MANU-FACTURING COMPANY, 1401 Foch Street. Fort Worth, Texas, Edison 9461.

FOR SALE cheap! Two steam heating coils for Carrier Weathermaker 50K12. Used one season, good as new. Make me an offer. L. GOLDBERG, 3339 Webb Avenue, Detroit 6, Michigan

BRAND NEW, latest model Compressors BRAND NEW, latest model Compressors up to 5 hp, at tremendous savings! Scaled units—¼ hp. @ \$45; ½ hp. @ \$55; ½ hp. @ \$70. Model S64 ¼ hp. domes (motor compressor assemblies) @ \$33. Also ¼ hp. DC and 25 cycle AC open-type. Quantities limited, so act now! MANN REFRIGERATION SUPPLY CO., 440 Lafayette St., New York City, Gramercy 3-8000.

UNITED UPRIGHT freezers, 17 cu. ft. 1/4 Tecumseh unit. Food plan close-out. Ori-ginal crates and factory guaranty. Price \$279.50 f.o.b. Philadelphia. Special discount for entire lot of 20, MILTON AS-SOCIATES, 123 S. Broad St., Phila., Pa.

BRAND NEW Bush, Marlo, Betz Filter-BRAND NEW Bush, Marlo, Betz Filter-pure unit cooler, celling mounted and panel wall type Models WM-45, WM-25, 540-P, 433-P; Marlo 68-UC, 95-UC, 134-UC; also Larkin Model 98. All nationally-known manufacturers. Servel ¼-hp. units; double shaft 1050 r.p.m. G-E motors; M-H temperature controls. Limited quantity. Act now. Write for our low prices. R. & R. EQUIPMENT CO., 2724 Third Ave., Bronx. N. Y.

FLARE FITTINGS forged brass, ¼" long necks, 4 cents, brass; %" long necks, 5 cents, brass short and long necks, ½" short and long necks hort and long necks; ½" steel cad plated, long necks, 2½ cents; ¾" steel cad plated long necks, 3 cents; ½" steel cad plated long necks, 5 cents; ½" steel cad plated long necks, 5 cents; ½" copper bonnets, 1 cent, \$7.50 M. 200 brand new #894 Freon expansion valves, 15' ½ x ¼ connection, 36" tube, ½ ton, \$2.00 each, 350 condenser fans, 8" ½75 hp. motor complete with horseshoe bracket, 175mmf capacitator and #1057 relay, \$2.25 each, 1500 new ¼, ¾, ¾, ½ hp. rotors and stators. With these you can replace to stator in a hermetic for a fraction of the cost of rewinding the old one, ¼ hp, \$3.50; ¼ hp, \$4.00; ½ hp, \$4.50; % hp, \$5.00. Or will sell the whole lot as a package deal, GEO. SPECTOR, 951 South Dix, Detroit 17, Vi. 2-0770.

ATTENTION SERVICEMEN - Send for our 1953 Catalog, Relays, expansion valves, controls, dehydrators, V belts, open & hermetic units. All new merchandise at great savings up to 50%. Sold on Money Back Guarantee. WALTER W. STARR REFRIGERATION, 2833 Lincoln Av. Chicago 13, Ulinois coln Ave., Chicago 13, Illinois

PRANCHISES WANTED

MANUFACTURER'S AGENT wants lines of reputable equipment. Will give your product the representation it needs. Operating out of Jacksonville and covering any or all of Florida, Georgia, and Ala-bama. Engineer, experienced in design. Jacksonville and covering stimating and contracting of air conditioning, heating, ventilating, process piping and plumbing. Has directed large sales force and has had own mechanical contracting company. Write BOX 4313, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

MANUFACTURER'S REPRESENTA-TIVES desired for various territories in United States for our new Cooler Cub bottle water coolers. These are smaller in size and weight but equal in capacity to others. Extremely attractive price setup. Give full background and territory covered. REMCOR PRODUCTS COM-PANY, 321 E. Grand Avenue, Chicago 11,

DISTRIBUTORS WANTED in New York and Boston trading areas for nationally known line of air conditioning and refrig-eration equipment. Write BOX 4307, Air Conditioning & Refrigeration News.

FOR SALE completely equipped Sheet Metal Shop, Specializing in Heating and Air Conditioning, Franchised Distributor for well known Refrigeration Mfg. with twenty-seven County territory, Also dealer for well known furnace, Shop located on Main St. of town with 12,500 Pop. 2600 feet floor space, 3000 ft. elev. located in southwest. Did \$155,000 gross in 1952. Shop equipment and building all go for \$50,000 plus inventory. BOX 4314, Air Conditioning & Refrigeration News.

MIDWEST COMMERCIAL refrigerator manufacturer with national distribution currently has an open spot in the state of Iowa for a state-wide distributor, pre-ferably centrally located. Consideration will be given to any inquirer with suffi-cient capital to do a job in keeping with the potential offered by one of the most complete commercial lines anywhere in complete commercial lines anywhere in the country. Write, giving information on showroom and warehouse facilities, sales organization, etc.; full discussion can be arranged for either your office or at the factory. BOX 4316, Air Conditioning & Refrigeration News.

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DEPARTMENT OF DEFENSE

Quantity Invitation Description Yards & Docks Supply Officer, Port Hueneme, Calif. Attn: Purchasing Division Air condition R 60,000 BTU 16 ea. 2485/53Q cooling cap., Spec. MIL-A-16321 w/modifications. 16 ea. 2485/53Q 29 Jun 53

Business Service Center, General Services Administration, Region 4, 50 Whitehall St., S.W., Atlanta 3, Georgia Window ventilating fans Job CR4-467 10 Jun 53

Window ventilating fans U.S. Post Office and Court House, Durham, N. C. Purchasing and Contracting Office, Memphis General Depot, U. S. Army, Memphis, Tennessee

(QM-40-110-53-49) 1 ea. 15 Jun 53 Purchasing Branch, Letterkenny Ordnance Depot, Chambersburg, Pennsylvania

53-156B 53-156B 53-156B 4 Jun 53 4 Jun 53 4 Jun 53 After cooler Air receiver Evaporative water cooler Headquarters, Sheppard Air Force Base & 3750th Technical Training Wing, Sheppard Air Force Base, Texas
Necessary services and materials to install evaporative coolers in Nurses' Quarters 1 Jun 53 tive coolers in Nurses' Quarte in accordance with plans and specification.

specification.

District Public Works Office, Sixth Naval District, Naval Base, Charleston, South Carolina
Alterations to heating system. 1 35237B 9 Jun 53
NAD-Charleston, S. C.
Contracting Officer, Rocky Mountain Arsenal, Denver, Colorado Consists of construction of Job 53-45B 18 Jun 53 gas heater house and exterior medium pressure distribution service pt.
The conversion of coal fired burners to gas burning.
Installation of gas fired unit heaters in 7 bldgs.

General Stores Sunnly Office, 700 Robbins Ave., Philadelphia 11.

General Stores Supply Office, 700 Robbins Ave., Philadelphia 11,

Cooler—drinking water 379 ea. 4-1559B 3 Jun 53 bubbler, shipboard type, without pitcher filler, single cabinet complete self contained electrically operated unit, corrosion resisting metal, adjustable temp control between 45 degrees and 60 degrees F. MIL spec. MIL R 1834A Amend 1.

District Public Works Officer, Eleventh Naval District, San Diego, California

Install air conditioning Job 38951 9 Jun equipment in link trainer bldg. nr. 37 Nas Los Alamitos, Calif. 38951 9 Jun 53

Contracting Office, Office of the Quartermaster, West Point, New York Installation of automatic air Job (MA-30-145-type temperature controls. 53-154B) Navy Purchasing Office, 111 E. 16th St., New York 3, N. Y.

16,371 ea. 1625B 9 Jun 53 10,710 ea. 1576-B 12 Jun 53 Fan, electric. Fan, electric. Headquarters, Fort Hood, Purchasing & Contracting Office, Fort Hood, Texas Air conditioning of Bldgs. Nos. 3259 & 3260 at Fort Hood, Texas. (E-41-093- 15 Jun 53 53-43) Job

Mood. Texas.

Ogden Air Materiel Area, Hill Air Force Base, Utah, Directorate of Procurement and Production

Installation of air condition of the Market Mar 171 5 Jun 53

8 Jun 53 forced warm air heating system in Whs. 1-P, Bldg. 102, Hill AFB, Utah. Purchasing and Contracting Office, Perrin Air Force Base, Texas Services for furnishing all Job (41-610- 8 Jun 53

plant. labor, materials, 53-46B) equipment and performing work in strict accordance with specifications, the schedule and drawings forming parts thereof for the additions and alterations and the installation of an Air Conditioning System to Hospital Administration Building No. 52-5. 53-46B)

Services for furnishing all Job (41-610-10 Jun 53 plant, labor, materials, 53-44B) equipment and performing all work in strict accordance with these specifications, the schedules and drawings forming parts thereof for the construction of a building between 52-18 and 52-18, and installation of air conditioning system in all three buildings, modify exterior electric system.

Purchasing & Contracting Office, Camp Gordon, Georgia
Specifications to install
Air conditioning in eight
Hospital Buildings, Camp
Gordon, Georgia.

Specifications to install
Job (09-057- 15 Jun 53 53-73B)

53-73B)

Officer in Charge, Navy Purchasing Office, Washington, D. C. Air conditioning units without 10 3371-Q 10 Jun 53 without plenum cooling towers—75 tons.

GENERAL SERVICES ADMINISTRATION Description Quantity Reference No. App. Bid Date

Business Service Center, General Services Administration, Region 3, Washington, D. C.
Ventilation of work room. Job GS-R3-3044 10 July U.S. Post Office, Washington, D. C. GS-R3-3044 10 Jun 53 Business Service Center, General Services Administration, Region 4, 50 Whitehall St., S.W., Atlanta 3, Georgia

oof exhaust fans, U.S. Post Office, Roanoke Rapids, N.C. Job CR4-474

General Services Administration, Region 2, Business Service Center, 250 Hudson St., New York 13, N. Y.
Repairs to ventilation system Job None 10 Jun 53 U.S. Mint, Phila., Pa.
Renewing drinking water. Job None 10 Jun 53 cooling system. Vets Admin, Bidg., 128 North St., Phila. Pa.

CONTRACTS AWARDED THROUGH MAY 25

Corps of Engineers, U. S. Army, North Atlantic Division, Philadelphia District, 121 N. Broad St., Philadelphia, Pa. Fan, air circulating, desk and wall type, 110 volt, 1 phase, 60 cycle, oscillating, metal blades, 12 in.—1,272, \$27,220.—Mimar Products, Inc., 138 Spencer St., Brooklyn 5, N. Y. Fan, air circulating, desk and wall type, 110 volt, 1 phase, 60 cycle, oscillating, metal blades, 16 in.—4,464, \$96,422.—Mimar Products, Inc., 138 Spencer St., Brooklyn 5, N. Y. Air conditioning unit for installation in truck.—20, \$25,960.—York Corp., 1616 Walnut St., Philadelphia, Pa.

Headquarters, Air Materiel Command, Wright-Patterson Air Force Base, Ohio Container Box, refrigerated semi-trailer Chasses, 67 ea.; Spare Parts & Data, 26 ea. PR-1939981 Q.—\$641,043.—Brown Trailers, Inc., Box 873, Toledo, Ohio.

U. S. Navy Purchasing Office, 180 New Montgomery St., San Francisco 5, California Electrical equipment (refrigerators, freezers, washers, hetrical equipment (refrigerators, freezers, washers, water heaters and fans) (20573-P5-Q).—202 ea., \$25,332.—General Electric Supply Co., 1201 Bryant St., San Francisco, Calif.

General Services Administration, Business Service Center, Region 3, Washington, D. C. Window air conditioning units.—607 ea., \$83.050.—Emerson Radio of Washington, Inc., 1522 14th St., N.W., Washington, D. C. District Public Works Office, Third Naval District, 90 Church St., New York 7, New York
Plant rehabilitation and air conditioning, Naval Industrial Reserve Ordnance Plant (Daco Machine and tool Co.), 125 Firsting Co., 1068 Avenue C., Bayonne, New Jersey.
St., Newark, N. J. NOy-76993.—Job. \$45,960.—American Heat-

Corps of Engineers, U.S. Army, North Atlantic Div., Philadelphia District, 121 N. Broad St., Philadelphia, Pa.
Fan, exhaust, paint room type, belted ventilator, 220 volt, 3 phase, 60 cycle, 7.750 cu. ft. per minute, 24 inch.—900, 8199.377.
M & E. Mfg. Co., 2571 Winthrop Ave., Indianapolis, Ind.
Refrigeration equipment, motor driven freen type, 33,000 B.t.u. per hr. for 20 x 52 ft. warehouse.—18, \$84,817.—Reco Products Div., Refrigeration Engrs. Corp., 150 Nassau St., New York 38, N. Y.

Procurement and Contracting Office, Vance Air Force Base, Oklahoma Air conditioning of Hospital Bldgs., Project 9-53 34-600-53-31.— Job, \$14,163.—Billings Elect. Co., Enid, Oklahoma.

Navy Department, Potomac River Naval Command, Naval Gun Factory, Washington 25, D. C. Air conditioning auditorium and classrooms, National Naval Center, Bethesda, Md.—Job. \$30.490.—McCrea Engineering Co., 514 2nd St., N.W., Washington, D. C.

'Expansion' Is Key at Supermarket Show-- Worthington--

(Concluded from Page 1, Column 3)

By the end of the year, 22% of the total supermarkets will have been built new or undergone major remodeling, his survey showed. Of these 13% will be new supers while 9% will be substantially renovated.

(He also revealed that on April 1 this year SMI had 603 member companies operating a total of 6.639 stores with a combined sales volume in 1952 of \$5,214,000,000.)

Continued growth of self-service operations was also noted.

'Nearly three out of every 10 supermarkets operated by the SMI members (28%) are completely selfservice in all four major departments grocery, meat, produce, and dairy," Kornblau said. "A year ago, 25% of the supers were fully self-service; two years ago, 19%.

53% HAVE SELF-SERVICE

"Well over half of the supermarkets (53%) have complete selfservice in their meat departments, compared with 49% last year. Another 24% have partial self-service, and only 23% are still on a service

"Complete self-service is now the most common method of meat operation in every region except the West North Central, which has more partial self-service than complete selfservice."

As for the other departments, 53% of produce departments are on partially self-service, 44% fully selfservice; the dairy department is selfservice in 91% of the supers; the grocery department is self-service in

every super, according to this survey. Productivity of self-service meat departments can be increased from 19% to 31% with "proper work methods, newly designed equipment, and more efficient layout," members also learned from E. M. Harwell of the U.S. Department of Agriculture, discussing a study made

with the cooperation of three supermarket chains.

"Practical applications of the new work methods and equipment were made in the self-service meat departments of seven of the cooperating stores," he said. "Use of the improved systems led to a preliminary estimate of increased output in those operations averaging 23%

"An analysis of the labor requirements in typical self-service meat markets showed that two functionsretail cutting and packaging accounted for 65% of all of the manhours necessary in their operation. Most of the improvements developed through the studies were made in these operations," Harwell explained.

The complete USDA report will not be released for several months.

"A number of opportunities were found for improving self-service meat market layout," Harwell also said. "Designing a good layout consisted of tying together the successive operations in a market in a manner providing a smooth, continuous flow of product with a minimum number of handlings and a minimum amount of walking."

425 COMPANIES SHOW PRODUCTS

Of the major interest at the SMI convention, besides the informative business sessions, was the largest exhibit in the group's history which found 425 companies showing their products at the Public Auditorium.

Among these were several refrigeration manufacturers: American Gas Machine, Freezer Box Division of Annapolis Yacht Yard, Evans, Federal Refrigerator, Freez-Rite Division of Bailey & Perkins, Friedrich, Frigidaire, C. V. Hill, Hussmann, McCray, National Market Equipment, Sherer-Gillett, Tyler, Typhoon Prop-R-Temp, and Weber.

(Photos showing the new products exhibited by these firms will appear in an early issue of the NEWS).

(Concluded from Page 1, Column 2) wide and 600 ft. long will be erected for the manufacture of the company's line of self-contained air conditioning units in commercial sizes of 3. 5, 10, and 15-ton units, as well as related products.

The building, designed without windows, will contain more than 160,000 sq. ft. of floor space and will be completely air conditioned. An office building containing 10,000 sq. ft. of floor space will also be provided.

Recommendations to build the plant at the Decatur site were made after conducting an extensive survey of the Southeast for a suitable manufacturing location.

Erection of docking facilities on the Tennessee River will provide the Worthington plant with direct inland water transportation, allowing materials to be shipped in and finished products to be shipped out by this means. Railroad siding facilities are also available to the plant.

Location of the building in Decatur marks the first time in Worthington's 113-year history that it has had a manufacturing plant in the South. The proposed plant will also be the largest manufacturing installation in the South devoted exclusively to making air conditioning equipment.

It is planned to bring the new plant into operation by November 1953—for 1954 spring and summer sales. Holyoke Works production of air conditioning apparatus will, therefore, continue well into the summer of 1954, and possibly thereafter, depending upon the growth of the load and the performance of the new

Room Cooler Group -- Auto Conditioning --

(Concluded from Page 1, Column 4) section's current statistical program under which non-members can send in statistics and receive industry figures without charge will be continued this year.

Elected to succeed Laube as section chairman was W. F. Carolan, general sales manager of RCA Victor's Air Conditioning Dept. A. E. Meling, product manager, unitary equipment, Carrier Corp., was named vice chairman.

Advantages of association membership were outlined by both Laube and George Jones, managing director of ARI. Jones also reviewed developments leading up to the merger of ACRMA and REMA into ARI and explained how the latter plans to

Following Jones' talk, Robert W. Morgan, chief engineer for Fedders-Quigan Corp., told how functions and activities of the engineering committee aid room air conditioner sales.

Charles Brewer, manager, market research, Major Appliance Div., General Electric Co., then discussed marketing facts and their profitbuilding value, and Abbott Folsom, assistant manager of Carrier Corp.'s Service Dept., talked on how the serviceman can be of help to the

In addition to other talks, the group heard a presentation on "The Utility Looks at the Room Air Conditioner." Prepared by Ted B. Ferguson, vice president of Texas Power & Light Co., the paper was read in his absence by D. S. Coffman, who is assistant sales manager of the

(Concluded from Page 1, Column 3) meet in his office at 2 p.m. Tuesday.

A similar meeting last March aired the question but reached no conclusions. The refrigeration men argued that automobile manufacturers and dealers should be licensed when they work on air conditioning equipment. They feel that exempting the auto industry would only lead to requests from other groups—such as heating contractors who install year-round air conditioning equipment—for similar exemptions.

Spokesmen for the automobile industry contend that there is no question of safety involved and if there were it could not and should not be solved at the local level. They declared that the state motor vehicle code provides ample safeguards for the public. They also contended that the refrigeration code is intended to apply only to buildings and not to vehicles.

Drogosch asked the two groups to reach a working compromise so that an agreed upon amendment to exclude the auto industry from provisions of the safety code could be submitted to the city council, if one is deemed necessary.

He pointed out that under the present regulations, automobile firms installing and servicing air conditioning units are required to have licenses and to be inspected by the department of buildings and safety engineering.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

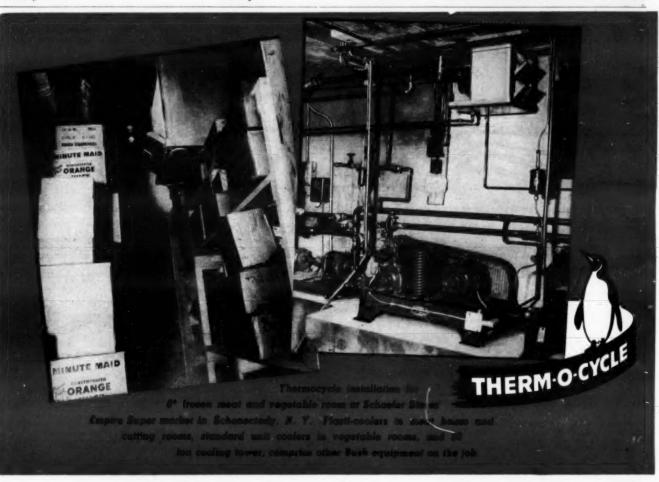
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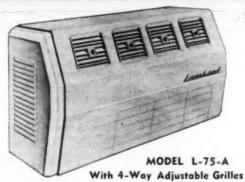
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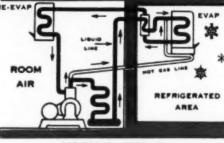
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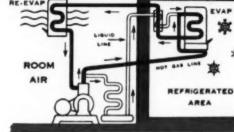
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